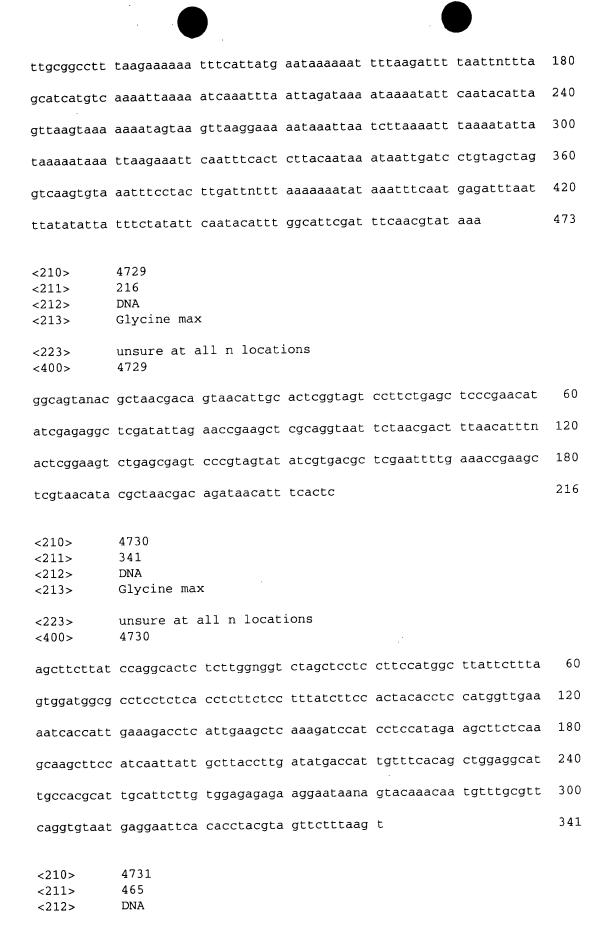
| ć | agagactcc | aattcatcat | atagccctat | taacaatatt | cagctgttgg | atg | 473 |
|---|----------------------------------|-----------------------------------|------------------|------------|--------------|--------------|-----|
| * | <210> <211> <212> <213> | 4724 425 DNA Glycine max | ζ | | | | |
| • | <400> | 4724 | | | | | |
| ė | atatatatat | acttatatat | atatatatat | atatatatat | acatatatat | atatatatat | 60 |
| | atatatatat | atatgtttag | gcagaaagat | accttgcata | tgcatgtatg | tagcacaaac | 120 |
| • | aacttcacaa | aatatatata | tgtatgtata | ggtagcaaga | taccctgcat | atgcatgtat | 180 |
| | atagcaaaaa | tatctcacaa | aacatatata | cgtatgttta | tgtagcaaga | tacctgggac | 240 |
| | acacatgtat | actacaaaat | acctcacaaa | aatatacgta | tcgttaggta | gaaaaatacc | 300 |
| | tcactgtaca | caacgagagc | gagtctgatc | agaattctaa | ccattgcctc | ctaccgaact | 360 |
| | ctatctaaca | tacccaacta | caacggtcgc | ctagctacaa | cctcctccct | ctaatacaca | 420 |
| | caccg | | | | | | 425 |
| | <210> <211> <212> <213> | 4725 420 DNA Glycine ma | x all n locat | ions | | | |
| | <223> <400> | 4725 | all ii locac | 10110 | | | |
| | tccttntagt | gcgtcacgtn | taanaccgag | ctcgatggng | ttgttagcct | ttgatgtgac | 60 |
| | tcggcgggaa | gtgatggtag | aaatcgacat | tcccattcag | ı ataggccccc | acacttgcaa | 120 |
| | tgtggtgttt | caagtaatgg | atataaatco | cgcctatago | : tgcctcttgt | gaagaccttg | 180 |
| | gattcatgcc | ctgggaagtg | gcccttcaac | getteaceag | g aaattgaagt | tcgcagtggg | 240 |
| | tagactctta | gtgatagtgt | cgggtgaaga | ggatatgtta | a gtgagttgcc | : cctcctccgc | 300 |
| | accgtacata | gaagcggcgg | aagaatcatt | ggaaacggct | ctccaatcct | ttaaggtggc | 360 |
| | gagetgeged | : tcggtggaac | caagtccgtc | gctactttct | ctctccaacg | ı tggccataat | 420 |
| | <210> <211> <212> <213> | 4726 401 DNA Glycine ma | ax | | | | |

| | unsure at all n locations 4726 | | |
|-------------------------|---|-------------------|-----|
| gcccactcca | tcattaggat tatttcctga catctcanac aaacaa | aatca aacgtaacaa | 60 |
| gacaattata | gttgctgttt gaatacctca cccactcaag tgtate | cacac aattatggct | 120 |
| tttctctaat | gaaacactct tgccttttac cactctaatt cccct | tgagt tcttaggcaa | 180 |
| ttcaagagat | tatggccaca acaaagaaca attcaccaat atgtg | taagg gaaggctaga | 240 |
| caaggaaaag | gttaaccaag aaaaaggcta acaatgtttt taggc | acaaa tgaaggaaac | 300 |
| aaaattcaga | atttatgaat tcaagtaaca atccttcatg caacc | aatat attaccttaa | 360 |
| agagtntttt | tttntaagtt cttcaagcat gaaccattca g | | 401 |
| <210> <211> <212> <213> | 4727 409 DNA Glycine max | | |
| <223> <400> | unsure at all n locations 4727 | | |
| agcttgtcat | aactttatct cgagcccagt gtttttaata tacca | tttat tgcnaaaaga | 60 |
| actagnggat | catgtgtgta atcttgatac taatttgctt ctatt | ggaag aaaaagatat | 120 |
| tgagttatac | gttgtatcca aagttcatat ctagaaaata aaaat | gaagt ataaaatgtt | 180 |
| aagcattttg | tagtatgtgt tetttaggtg ettagtaeat tgetg | gccgc catactnttc | 240 |
| tgagctttca | taattgacat totatattta catcaataca ggaat | aaaca gatctttaaa | 300 |
| caatggtgaa | atcaacaagg aaattatgct tcagctttct aatgt | gccaa aagctgtacc | 360 |
| tatctgcaaa | atttctgatg ttgactcttc tgaggtatgt atgac | tact | 409 |
| <210> <211> <212> <213> | 4728 473 DNA Glycine max | | |
| <223> <400> | unsure at all n locations 4728 | | |
| ngtaaaacca | attttctaga aagttagcta attccaatat taatt | agaat ttttgttcgt. | 60 |
| taätgtgcat | aaaatttaca tgtaagattg acatagattt tatag | aggtc aatctgtatt | 120 |



| <213> | Glycine max | |
|-------------------------|--|--------------|
| <400> | 4731 | |
| tcaggttgtt | caattgcttc agattgctgc acaaaatgta tattgtttgt gtg | gtggtcg 60 |
| gcagaggagc | ataaaccaca aactcttgtg acaagtacaa atttctgatt caa | ggtcagc 120 |
| ggtgttacca | agttaaccaa ggcatctagt ttaccttcaa gcttcttagt ttc | agctgat 180 |
| gaagatgaat | tcgtggctac ttcatgcact cctctaatga ctatagcatc att | tatggca 240 |
| ctaaactgtt | gggagttgga agccatcttc tcaattaaat ttctggcttc agc | aggggtc 300 |
| atgtctccaa | gggctccacc actggcagca tctatcatac ttctctccat gtt | actgagt 360 |
| ccttcataaa | aatattggag aagaagctgc tcagaaatct ggtggtgagg gca | actggca 420 |
| catagtattt | aaatctctcc catattcata taagctctct cactg | 465 |
| | 4732 353 DNA Glycine max unsure at all n locations | |
| <400> | 4732 | 60 |
| | tettteggaa gtttateate tttattgget tettgaggag gag | |
| _ | ccttttcctt tacaatctng tccatgaata tgcatttgtt cta | |
| | tctaaaatat cctttcttga agaaatagca ttagactcat caa | |
| | tattcaatag tcatagttct tttattatat attctataag ctt | |
| | ccaaggaaaa ttccttcatc tgacttagca tcaaattttc cta | |
| ttttccattg | tttaatacaa agcatttgcc accaaacaca tgttgatgag aga | a 353 |
| <210> <211> <212> <213> | 4733 482 DNA Glycine max | |
| <400> | 4733 | tgttctga 60 |
| | a getttaegga tttggtette acegaegaat ggateaaagt gt | |
| | a totgatoato otgoattgat gaatactata attgoggoaa atq | 33 |
| tgacaatgag | g ggatatacct ctgctatgac tgccattcct acacggccaa at | ttcctgtc 180 |

| agcccaacaa | tgtcattact | cagtcaataa | cagttgctct | cacccaataa | tacacaaagg | 240 |
|-------------------------------|--------------------------------------|--------------------------|------------|------------|------------|-----|
| ccatccccaa | tcatccacaa | agcctgcccg | ctgcacatcc | agtgccacaa | caccaaccat | 300 |
| aaaggaattt | tgtagcacaa | agcctgtagg | attcacccca | cattctagtg | tcatatgcca | 360 |
| acttgctctt | atatctactt | gataatgcaa | tggaagccat | aacccctgcc | acggttcctc | 420 |
| aacctccatt | cttcagagga | tacgactcga | acgcaacatg | tgcatatcat | ggaagagttc | 480 |
| tg | | | | | | 482 |
| <210> <211> <212> <213> <223> | 4734 269 DNA Glycine max unsure at a | K all n locat: | ions | | | |
| <400> | 4734 | | | | | |
| gcatgcaagc | ttaaagtatg | ctcgagtcat | tcatccctat | gagatgttgt | tgaagaaang | 60 |
| aggatcagaa | ttgccattcc | ttggattata | tggtttagcc | aagctcatgc | ttggacagaa | 120 |
| •aggctcatta | tatcaggttg | aagaaacgaa | gattccgtat | tgcaaaatta | gagcaaaaga | 180 |
| ggaatccagt | ctcatcactg | caaaggctac | tgccaaacat | atttacgatt | ggtgatgtac | 240 |
| tttgtacttc | caatttgacc | ttgacaaag | | | | 269 |
| <210> <211> <212> <213> | 4735 444 DNA Glycine ma | × | | | | |
| <400> | 4735 | | | | | |
| ctctgcagat | tggtcttcga | cagtgaagga | taatgttgat | ctaaatatgc | aaagttgatc | 60 |
| atcctacgag | gacgactgag | aaaactgtgg | cagatcaaga | cggtgaggat | gagggagaga | 120 |
| cctatgctgt | tactgacatt | cctgtacggt | caagttgcct | actctaccca | tcactatttt | 180 |
| tactcagcca | attacaaact | atgtacttac | ccaccaccca | ggtátccaca | aaggccagac | 240 |
| ctaaatctaa | cacacagtct | gtggaccgca | ctttcaatga | caaacaccac | ctttagcaca | 300 |
| tatcatatac | accaaccgag | aagtgaatct | ctgagcgaga | aagcctgtac | aattcacccc | 360 |

atttccactg tcctatgctg acttgattcc atatctactt gataattcca tggtagccat 420

| gaccctagcc | aaggttcatc aacc | 444 |
|-------------------------|--|-----|
| <210> <211> <212> <213> | 4736 119 DNA Glycine max | |
| <400> | 4736 | |
| agcgtgtacg | atgcatctct atagtactca ctggtgtgtc cacattgcga gtcgtgcatt | 60 |
| gttattctcg | ttctgttact tattataccc actgttgacg agctcatgcc gtttgactt | 119 |
| <210> <211> <212> <213> | 4737 208 DNA Glycine max unsure at all n locations | |
| <400> | 4737 | |
| tgagatgagg | g aagtgttgaa gggtgaaact ttctttctta ttgttgacca cagagtggta | 60 |
| cctggagata | a tgtcgcggng gtcaggagac cttggggacg tcaggtgtgg tgctattgcc | 120 |
| caaaaccaag | g cttgaccaat cccgacccaa cccggtcata gtttgtcagt gagaacctgt | 180 |
| gatgtaccta | a agcaggcgat ctcctggc | 208 |
| <210> <211> <212> <213> | 4738 265 DNA Glycine max 4738 | |
| atgtgtctag | g catcacgatt atcgtctccc ttcttgcaca tgttctgtac ttgcctccta | 60 |
| | a tattccaata ggactgatac tgcctaacaa acgcaaccat taagtccttc | |
| | a ctcgggaagg ttccaagtca gtgtaccagg taacagctac cccagttaga | |
| | a aggaatgcat caacaatccc tcatcttttg cgtatgctgc catcttccga | |
| | t ttaaatggtt cttgg | 265 |
| <210> <211> <212> <213> | 4739 434 DNA Glycine max | |

| <223> <400> | unsure at all n locations 4739 | |
|-------------------------------------|---|-----|
| ccttgtagaa | tggccagaca tgatacatgn cattgtttgt ttttttttaa gggaaaaggg | 60 |
| aagccccaca | ttatgtccat gacacaaatg cataaatgat gatttggaaa tcttatgcac | 120 |
| aactggtcat | gcatgcacct atgtggacac tcaagtgtca aatttttatg gtcatgtgat | 180 |
| gctagggctc | acgattcatt tcctctattc ttagtcaacc caatgttccc aaaatatgtt | 240 |
| cttttaccaa | tgtgtgcatt catcctagac cattttggag actcgtgaaa atttcacagc | 300 |
| attcaccctt | cacgtgtata cacatctttt taaaaaactac gtatgatcag agatttattt | 360 |
| aaagaaaagc | tggaagtaat ctcttttcaa aagcatgtta gatttctaga tagacaactc | 420 |
| atattctttt | tctc | 434 |
| <210> <211> <212> <213> <223> <400> | 4740 405 DNA Glycine max unsure at all n locations 4740 | |
| agcttgaacc | ataaccggtg agagtgtgac cttaaactgc gagtgaatga ctagctttga | 60 |
| gtaatggtct | tttcatcaat ctctgaaatc tagaatgaaa tgtatgaatg aggacatggt | 120 |
| gaaggccata | attgtatata caagccaatt gaccaaagag cttaccttga attataattg | 180 |
| tatcctttgc | tccctttgtg agctaaatta cattttcaaa attgaacctt gaacttgaat | 240 |
| gagtacctcc | agatacettg tttagattet aggagageat atggtteaag geaaaettae | 300 |
| cccaaattcg | gnggagtgga gctgagtggg atttaaagaa naaggtaaag catcaacaca | 360 |
| cacataacaa | ataagttgtg ttaaaaaaaa agcaataaaa gaaaa | 405 |
| <210> <211> <212> <213> | 4741 465 DNA Glycine max | |
| <223> <400> | unsure at all n locations 4741 | |
| ngcctcanag | agatctagga aggataaagc ggttgaagga accatttccg ctcccgaata | 60 |

| tgacagcctc | cattntagga | gcgctgagca | ccagcagcgc | ttcgaggcca | tcaagggatg | 120 |
|---|--------------------------------------|-------------------|------------|------------|------------|-----|
| gtcatttctc | cgggagcgac | gcgtccagct | cagggacgac | gagtataccc | actttcagga | 180 |
| ggagatagtt | cgccggcgtt | gggcatcact | ggttaccccc | atggccaagt | tcgacccaga | 240 |
| catagtcctc | gaattttatg | ctaatgcttg | gcctacagag | gagggcgtgc | gagatatgcg | 300 |
| atcctgggtg | aggggtcagt | ggatcccgtt | cgatgcagat | gctctcagcc | agttcctggg | 360 |
| atacccttta | gtgctggagg | agggccagga | atgtgagtat | ggccagagga | ggaaccggtc | 420 |
| cgatgggttc | gatgaggagg | ccatcaccca | gttgctatgt | atacc | | 465 |
| <210> <211> <212> <213> <223> | 4742 366 DNA Glycine max unsure at a | k all n locati | ions | | | |
| <400> | | gagtagaaat | atatgattta | ttaattaaaa | caggagteee | 60 |
| | | | | ttccttggaa | | 120 |
| | | | | gngtattagc | | |
| tttagcttgt | tcgaccctat | aaagagcgca | ttcattctgt | caagaggcca | ttgcgcccca | 180 |
| ttatgccttg | gcttaatggt | ccccaacttt | cagggaaagg | tttaattgtt | aatgctacgc | 240 |
| tgagctttca | atcttctgct | tcaggaaatg | ggcatatcaa | tgggtctact | ccttaacaca | 300 |
| tcggtcaatt | gcattggttg | atacatgagc | atgtacaact | tcttattcag | gcattcttta | 360 |
| tatcga | | | | | | 366 |
| <210> <211> <212> <213> | 4743 494 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 4743 | all n locat | ions | | | |
| tatatcttga | caccgatata | actagctgcg | gaacagccat | gcaatagaag | aagaggaccc | 60 |
| ttttattcaa | cataagcgag | attccaatat | tacctattga | ccacaagagc | ttacaacatt | 120 |
| aacctgctcg | agggtccata | ttgttacacc | gactatatta | agtgactctt | ggaacacata | 180 |
| tgagatccct | aaccaattaa | caaatgggcg | gactttgggt | tcttgataac | attaaatgta | 240 |

| ataacatact | ggtactacca | aatacacaca | aaggttgtat | gtctgtactc | ggacaacaga | 300 |
|------------|-------------|--------------|------------|------------|------------|-----|
| atatagttat | tcctgcgaca | ctagacatgg | acaacattgg | aatatgttga | tactgagact | 360 |
| cgtgcacaga | ggcgccacca | taggtctcta | actctccagg | tggcacgcta | acttgtatga | 420 |
| gttgatgaac | cacttggact | gcttgagttg | actcatgagt | atagtgttct | ttcattagac | 480 |
| tgtgtgctaa | ctcn | | | | | 494 |
| | 4544 | | | | | |
| <210> | 4744 | | | | | |
| <211> | 316 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | K | | | | |
| <223> | unsure at a | all n locati | ions | | | |
| <400> | 4744 | | | | | |
| taccaggcaa | tttttcaatc | ttngcaattt | aaaaaaaatg | acaccttagc | taatttggtt | 60 |
| gctttaattc | tgcatatcct | ttggaaattg | acttatagtt | gaactaactg | cactactgct | 120 |
| ataatagctc | ataattggct | ttaaactagt | ggaaaatata | acagaacatt | ggacaacatc | 180 |
| aacacacaaa | ataacatgaa | cccaaaaaaa | tgaattttcc | cattccacct | caggaatgca | 240 |
| taacatatga | caatgttggg | aataaaatgt | cacaaagacá | cattagcaaa | cctagataat | 300 |
| tgttcggtca | attcca | | | | | 316 |
| | | | | | | |
| <210> | 4745 | | | | | |
| <211> | 420 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | * | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 4745 | a11 11 100a0 | | | | |
| actaagctcg | tgtaatcatt | acactgattt | ggtattcgan | taccagttac | tgtttnttat | 60 |
| taaagcaaaa | gacgtaactc | ttcaaaaggt | atttgactct | ttcacattgg | cttaagttgt | 120 |
| tctaaaagtt | ataactctcc | taaacggctt | tcttgaccag | acatgaagag | tctataataa | 180 |
| caatgctttg | ctttgcattc | caataatctt | gaacacttat | tcatacaatc | ctttaccagc | 240 |
| cttgaatctc | tgtgaactac | ttcttttct | ttgaccaaaa | gttttcagag | cttctggatt | 300 |
| ccaaacctcg | aaacttggct | atcatctttt | attetttete | ctttgcaaaa | gaattgccag | 360 |
| gactaccgct | gaatcttttg | tgctctcttc | tcctcttcac | agaacaaaga | ctaacgctga | 420 |

| <210> <211> <212> <213> | 4746 373 DNA Glycine max | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a 4746 | ll n locati | ions | | | |
| agctntgatg | caacattngg | agaggttaat | gtatcaacta | tatgatgcgc | tccatgagag | 60 |
| gttggatcaa | atggagaata | gagatcataa | tgaagaagaa | aggaggagaa | gagggaatga | 120 |
| tggtgttcct | agacaaaacc | gaattgatgg | tattaaactc | aacattcctc | catttaaagg | 180 |
| aaagaatgat | ccggaggcct | acttggagtg | ggagatgaaa | atagagcatg | ttttctcatg | 240 |
| caacaactat | gaggaggacc | aaaaggtgaa | gcttgccgcc | acggagtttt | ccgactatgc | 300 |
| tcttgtgtgg | tggaagtgat | tatgcaagtt | gaagtggacg | tttccattgg | gaaatacaat | 360 |
| gataagggac | ttt | | | | | 373 |
| <210> <211> <212> <213> | 4747 349 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 4747 | ill n locati | ions | | | |
| cggaagctct | cgagaaaatc | gaatnntcat | atcttttcac | acggatgtcc | gattcggnga | 60 |
| cataactgat | ctagacgctc | gaaattgaac | aacggaagct | ctcgacaaat | tcgaatggtc | 120 |
| ataacttttc | acacggatgt | teggttetgg | gacataacac | atctagacgc | tcgaaatgaa | 180 |
| ccaccaaagc | tctagagaaa | ttcgaatggt | cataacttat | tacacgaata | gtcgattggg | 240 |
| aaaataatat | atcgagatgc | taaaaattaa | caaccgaagc | tctagagaaa | ttccaatggg | 300 |
| cataactctt | cacacagatg | tccgattcgg | ggatagaata | tgttgagac | | 349 |
| <210> <211> <212> <213> | 4748 384 DNA Glycine max | \$ | | | | |
| <400> | 4748 | | | | | |
| agettettt | ggaggtggaa | caatctatat | ttactctatc | agaaccatgo | tatatactca | 60 |

| cgactggtct | ctctcttccc | ttcgcaactg | gagtgtcact | attgctaccc | catagagete | 120 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| cgcgaaattt | gatacggcca | tactgctcct | tgagagccct | tttggtctct | tgagcaaggc | 180 |
| ctgttgcgtt | agtggcattc | tcttcccgta | acccggcaca | ctctttccga | acgtgtgtag | 240 |
| cggccaactt | gaacttctga | ttgtcacgat | atgcctttcc | taactcgctt | ttgagagcta | 300 |
| ggacttcttc | gtgctctgtc | ggggctttaa | aactctctgt | gctgacgact | ttaacttggc | 360 |
| gagcaatcta | agcccagata | tgaa | | | | 384 |
| <210> <211> <212> <213> <223> <400> | 4749 453 DNA Glycine max unsure at a | k all n locati | ions | | | |
| | | ggtggcgaag | ctccttcttc | tttggcttat | tecetagngg | 60 |
| | | | | catctccatg | | 120 |
| | | | | catacaagct | | 180 |
| | | , | | ggtgctcctt | | 240 |
| | | | | tcattattct | | 300 |
| | | | | ctacagctcc | | 360 |
| | | | | | • | 420 |
| | | | | gicilgeici | tgctcttgaa | |
| ccatgaattg | tgatgacgtt | aggatccttt | gag | | | 453 |
| <210> <211> <212> <213> | 4750 440 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 4750 | all n locat | ions | | , | |
| agcttcagag | ccaggcctat | gactgtcaat | tttattctgt | cactaaaata | aagaaccccc | 60 |
| attcttcagt | atcctcggcc | acaacggtag | taagagatcc | aactacaatt | taggctaaca | 120 |
| gtagttctca | ttcctaaagc | agtggaacac | tttttcattt | ataagagtcc | aggatgataa | 180 |
| aat = 0 = 0 t a 0 | attaattatt | 2225225522 | aatataggaa | tttagaaata | tatacatata | 240 |

| | gttgttgttg | ttattatata | catatagaga | tacaatagaa | aatcacataa | 300 |
|----------------|---------------------|-------------|--------------|--------------|------------|-----|
| | | | | | | 360 |
| | gattgcaaaa | | | | | |
| gttaatatgċ | aacgataaat | tattattctt | ctttctttgt | cactattaaa | ttcaattttc | 420 |
| tctaacataa | acggaaccct | • | | | | 440 |
| | | | | | | |
| <210> <211> | 4751 470 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | : | | | | |
| <223> <400> | unsure at a 4751 | ll n locat: | ions | | | |
| ntanatagca | acattccaat | aagagagaat | gaaaacatat | ttatccaaca | gaagtatcct | 60 |
| ttcattatcc | tccagtgcaa | acaagtactt | ataacattaa | cctgtttgtt | ggtccatatt | 120 |
| gtaacaccga | ctaattaatt | gactcttgga | acctatatca | catcccgtcc | aaatcaacaa | 180 |
| attggcttaa | tttgggttct | tcataataat | aataataata | aaagattgga | aagaaaaaag | 240 |
| aaaaagaaag | gttgaagggc | tcttcacgga | caacagaaga | gagttaatcc | tgcgacacga | 300 |
| gacatggaca | atagtggaat | aggttgatag | tgtgactcgt | gcaaagtggt | gcaaccatag | 360 |
| ttatcaaact | ctcaagttaa | ctcactaact | tttatgagtt | tatgagttca | cttgttctct | 420 |
| ttgagttgac | tcttgagtaa | attcttttt | tagtagactc | tgggtaaact | | 470 |
| | 4550 | | | | | |
| <210> <211> | 4752 507 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 4752 | | | | | |
| atttgaccta | gacatcgagc | accgagatco | : ttagagacga | actgcggcat | gcaagctttg | 60 |
| aagngaagag | gctataagta | ttgactatta | tgacgctata | a acagacacag | aagaccgcac | 120 |
| gataaattct | cctccattgg | atttagccat | gctacgaata | a taggangatg | ctgtggctat | 180 |
| actaaatcgo | actgcgtgtt | aagactcato | attctcgctt | taatgggaaa | gaaagaacct | 240 |
| ccagactact | tggagtgcga | gaagaaataa | tagcatgtgc | tgtcatgcaa | caacctatga | 300 |
| cgaggaccaa | a atggtgaatc | ttgccgccac | ggagctctcc | gacatatgct | ttcgtgtggt | 360 |

| • | | | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ggaagtgatt | atgctacttc | gaccgtacct | ttccattggg | aacctcatgc | tcagcgactt | 420 |
| ctgaagttct | ctcaccgtcc | tcacaatctc | ctcccgacct | aacttgtcaa | ctatcttcct | 480 |
| ccctcccc | atgataccct | ctgcccc | | | | 507 |
| <210> <211> <212> <213> | 4753 434 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a 4753 | all n locati | ions | | | |
| gcgagtgttt | agcctagtta | acttttttt | tatccaattc | gattaagaat | gagagatccc | 60 |
| aaagagaaaa | cgttcgattg | attgttcgct | ntattttact | aanagacgtt | gatgttttat | 120 |
| tattatatta | ctactttacc | tctttttgat | ttccaacgtg | gttacggtac | gaccgaacgg | 180 |
| gcggaattca | ttgtaaccga | agataatgga | taatacaact | caaacgatcg | gtggaaattt | 240 |
| attttattt | tagggtaagc | gagatatgac | ttacataaaa | tggcttaagc | acgtcaaaag | 300 |
| ggggtataaa | aagtaaataa | aacgagaatg | aaaatacacg | atacacaatg | tggaccacca | 360 |
| tgggtacata | gaatgaatcg | ataagcttgg | ttcgaggtac | ttactcgttg | aagatcgaag | 420 |
| aacgatgaag | aacg | | | | | 434 |
| <210> <211> <212> <213> | 4754 276 DNA Glycine ma: | × | | | | |
| | | aaccacatat | tetetattga | actaacaaaa | aagaatgcgg | 60 |
| _ | | | | | aagcgtacta | 120 |
| | | | | | ttgatacacg | 180 |
| | | | | | gttatgccta | 240 |
| | cttcaaactt | | | 949404949 | 90000 | 276 |
| aataataycc | CLICAGACLL | auguacaeta | 2000 | | | _ |
| <210> <211> <212> <213> | 4755 155 DNA Glycine ma | x | | | | |

| <223> <400> | unsure at a | all n locati | ions | | | |
|----------------|-----------------|--------------|------------|------------|------------|-----|
| gatgccanga | gaaacgcgcc | tgattgtcaa | cttctatgtg | actctcacac | tgtgacactt | 60 |
| cactcactat | acgggtgggt | caaaactctg | catcggatag | aaccctacgc | agataggccg | 120 |
| tctcgagacc | tcgacagcca | actctgacac | tgctc | | | 155 |
| 0.1.0 | 4756 | | | | | |
| <210> <211> | 4756 501 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <223> | | all n locati | ions | | | |
| <400> | 4756 | | | | | |
| ttgggctgtg | ccatgaaagt | ctngagatcc | cgagagtccg | ctcgagagac | cgcgaggtat | 60 |
| gcaggctggc | tcgaggctgt | taatgtttag | gctgtgctct | tggaaagaaa | actcgactat | 120 |
| cgtgaggata | ctcggacacc | gnaaacggcg | tataatccac | taccatatac | acaaacatga | 180 |
| gcgctcatta | atagaggcgg | aggcgactat | ttccttataa | cagtcgctgg | cgacagactg | 240 |
| tgaataatcc | gttatcaaag | cacccattac | aggaattgag | cttcgtacct | aaataatacg | 300 |
| cgtcgttgca | ggtggtgttg | tctctaacag | tgacacacat | atacttggca | aaagcgacta | 360 |
| gatgcgtact | caaaggcagt | tagcggtacc | aaaaactgca | catgtgcaca | tgttgggatg | 420 |
| tctaaaacca | tacatacaca | actctctgaa | gaatctcgct | atctcacata | aggtgcacat | 480 |
| tcctgcactt | ctaacgttcc | g | | | | 501 |
| | | | | | | |
| <210> | 4757 | | | | | |
| <211> <212> | 499 | | | | | |
| <212> <213> | DNA Glycine max | × | | | | |
| (213) | 01, 010 | - | | | | |
| <223> | | all n locat: | ions | | | |
| <400> | 4757 | 3 | | | | |
| ttagtctcga | gaacctgcan | nacgcgacac | atngaaactc | agctggagga | tatggcgacc | 60 |
| catacatggt | tattattgtg | ttcggccagg | acggaaccaa | gttgtcacat | aaccatgcgc | 120 |
| gctaaaccca | tcgtgcgcta | ttgaccacat | gcacatgaac | tcacgtacat | gcacgaaccc | 180 |
| catatactac | tatctcgtaa | cagcggggcg | ccatcaattc | gttcgagctt | gcgacacatg | 240 |

| | | • | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| caagcacaac | aactttcaaa | acggacaagc | tataatagtc | gagcgcaaca | tagagacgca | 300 |
| gaanacgtct | gctaacatat | gaaccaaaca | cggagctntt | ctgatttaga | gaccagagta | 360 |
| acctattgct | tcgatgcagt | tcgttaaccg | ttggatcgac | tccataatgt | tactagatgg | 420 |
| ctagagtgca | taactccaca | ttgcgatcgt | agggatctac | tcgcaaacat | cctgaaataa | 480 |
| ttcatggcta | caatttccg | | | | | 499 |
| <210> <211> <212> <213> | 4758 508 DNA Glycine max | | | | | |
| <223> <400> | 4758 | all n locat: | tons | | | |
| tttgacactt | ggccttggac | cctcgaancc | agcgattctt | agagngacct | gcggtatgca | 60 |
| agcttataag | agattatatg | gttattactt | tttacgcgaa | gnacgantgt | ggtgcattat | 120 |
| aaatcgagac | gctctaaccc | gcccactgga | cggactatta | aaattcanat | gtgtactaac | 180 |
| ttctacgtcg | gaggaccgat | tcaagcccat | caattaacgc | gacccccaaa | atctatcact | 240 |
| ggaagctctt | gagctattcc | aatggtcata | actttaaact | ctgatgtcca | tttcacggac | 300 |
| acaataattc | gagacggttg | aaattgtact | accggtgctc | tcacgaacat | tgaatgcact | 360 |
| aaacttttcc | caacgaggtc | caggtcaagc | gcataactca | tcgtgaccct | cggaattgat | 420 |
| caacccaagc | ttatcagaac | acctctggcg | ctgactattc | actcgcatct | cccagccgcg | 480 |
| ccgtcacata | tgcagatctt | ccacctcc | | | | 508 |
| <210> <211> <212> <213> | 4759 411 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 4759 | all n locat | ions | | | |
| agcttgaggg | aaaaattgat | gccttggtca | ttctagtaac | tcagcttgcc | atgaattaga | 60 |
| aatttgcatc | tgcacttgtt | gcaagagtct | gtaatctatg | ttttctgcag | atcaccatac | 120 |
| agatctatgt | ccttctttgc | agcaatctgg | agtcaatgag | caacctgaag | cttatgctgc | 180 |
| aaacattcat | aatagacccc | ctcagcagca | aaaccaacaa | aataattatg | atctttcaag | 240 |

| caatagatac | aatccaggtt | ggaggaatca | tccaaatctg | agatgggcaa | gccctccaca | 300 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| acaacaacaa | cagcctgtcc | ctcctttcca | gaatgttgcc | ggnccaagca | agccatatgt | 360 |
| tcctcctcca | atgtagcaac | aacagcaaca | gtcacaataa | aaacaacaag | С | 411 |
| <210> <211> <212> <213> | 4760 462 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 4760 | ll n locati | lons | | | |
| aatgtgacac | tattatctat | gtgtatgtgt | agttagtctc | ttatggcaat | tntgttattg | 60 |
| taatagactt | actgagggaa | ctagttctat | ttttttaatt | gttgtgtgtt | gaattttagg | 120 |
| tactttaagt | ttgttcaagc | gtttactagg | ttcagaaata | actgttttt | ggtatgtata | 180 |
| aatatttact | tgtatttagg | tcacatgaat | gttttcttat | taattattta | gtaagtatat | 240 |
| attgtatgat | tttgattaaa | tgttacagca | gaggtttcag | agtttangaa | gataactntg | 300 |
| ttctattttt | ttttttacaa | gtgttcactt | ctgaaattca | actgttaatt | cacacttaaa | 360 |
| atngatcaat | ttgtgttaca | tattgtggct | gcgcttgttt | gttagtgagg | ttaaaaattt | 420 |
| gttcttcata | agataatgat | gaatattcat | gttgtaaata | tc | | 462 |
| <210> <211> <212> <213> | 4761 543 DNA Glycine mas | ĸ | | | • | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| atgatccctt | gacnntctgc | gcaccntgta | gagacganac | tcagaggcac | tgcaagctct | 60 |
| atcacgagta | atnggatgtt | agttgctccc | tactcatttt | tgaanatgag | atggcacgct | 120 |
| atcgctatgc | gcttggacga | acagccaaga | gagtatctgg | cagageegea | gacatgcacg | 180 |
| atcactcaca | . ttcgaggacc | actgtggagc | tctgcagacc | gataccagga | gcctacctta | 240 |
| gagccatgaa | gctcatacga | acggtacatg | aacatgtaca | taatgcgcga | atatccaacg | 300 |
| ctaacgaaca | tagcaccatg | aagactaacg | caactgtgac | actgccatgo | cagaggaaca | 360 |
| agcatccact | ctcagcagaa | tgatctattc | taaggctcac | atcacaaata | aaagtgaaca | 420 |

| ggcgagaaca | cctacttgga | ctgccaacaa | cattaccccg | atgataccca | gacattcaca | 480 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| gaacacaacg | cgatcccacc | gcagacgcac | gcactagcac | gtgacatacg | cgtctgtcac | 540 |
| cct | | | | | | 543 |
| <210> <211> <212> <213> | 4762 158 DNA Glycine max | ς. | | | | |
| <400> | 4762 | | | | | |
| acgatccaaa | cgataggata | cacaagaaac | ggacccgatg | tagtgatgcc | atcctacccc | 60 |
| ccacgggcat | tggatcgaac | actccaatac | gaccgggcct | actatgctcg | ataaagccct | 120 |
| acgcctctca | tgcgccttag | ggtacatgtc | tgagccca | | | 158 |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | | | |
| <400> | 4763 | | | | ataattagag | 60 |
| | | | | | ataattgcag | 120 |
| • | | | | | tttttttgtc | |
| | | | | | ccaagcacaa | 180 |
| | | | | ctaatattcg | | 240 |
| catccaccaa | gtgacgtgtt | tgatttagtt | tattgagaaa | tataataatg | cattgcccac | 300 |
| tgcatctgca | tgaatcaatt | gacgcttaag | ttgtttaagg | ctaacaagaa | atatc | 355 |
| <210> <211> <212> <213> | 4764 415 DNA Glycine ma | x all n locat | ions | | | |
| <400> | 4764 | | | | | |
| tgcttctata | gtatttccgc | ctgccacctg | acgcatgggt | cttatttaac | agatgttgng | 60 |
| ntngnatgga | taaccacttg | nggtatttnc | gcctgccacc | tgacgcatgg | gtcgggaata | 120 |

| | | | • | | | |
|----------------------------------|-----------------------------------|--------------|------------|--------------|--------------|-----|
| gtaaatattg | tctttgtaca | gataatcaat | tgggtatatt | cgcttgtcac | ctgatgcata | 180 |
| ggtcatgatc | agcaaatgtt | gtgagaccaa | aagagtctca | gccggaagat | gctgacatct | 240 |
| tcagaaaggg | tgcagacaac | cacattggtc | tctgcgtgtc | aacgggctcg | cttgcctctt | 300 |
| gatgacgaaa | ggtgcggata | accataaagt | atgtctgcat | gctaccgaac | ccttgagtca | 360 |
| cgatatcaaa | ggtgagactt | tctcgcggtc | tcggtcggaa | gacactgaca | tctct | 415 |
| <210> <211> <212> <213> | 4765 457 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| agtcacctgc | ggcatgcaag | cttataagaa | cgaaattgcc | taaatcattt | tcaaatatgc | 60 |
| atgtgaatta | ggaagcatca | acaagaatca | agccaaggct | attgtgcaag | caatggggca | 120 |
| aaacacacca | aaagattatg | atgatggatt | gctcgaattc | tcacaaaggt | aaacttatca | 180 |
| ctttcaaatt | gagatttcaa | aactatcatg | acatgtaaag | gaaaaacaag | gatttcaagt | 240 |
| cacaaaatgt | caagagactt | ttattttcag | aacaattacc | cattacttga | acatatccta | 300 |
| taattcanag | acaaacatgc | aaatttaaca | caacaaaact | aacaaaatta | aactagaacc | 360 |
| caacaaaact | aacaaaatta | aactaattta | acacaactaa | caaaaccaaa | accaaagaac | 420 |
| acactenece | cccatactta | aacaatacat | tgtcctc | | | 457 |
| <210> <211> <212> <213> | 4766 427 DNA Glycine ma | | | | | |
| <223> <400> | unsure at 4766 | all n locat | ions | | | |
| gagatggtat | ctggtcttag | aaaataattt | gctaagagcc | aattcggtgc | gattggccaa | 60 |
| cctgaggaat | ggtgtagtct | tgctgctgac | tacttgcatt | gtggccccct | gcagctccca | 120 |
| ttcatatacc | tagggatgcc | tataggtgtt | aaccctagaa | ggaaggtggt | gtgggagcct | 180 |
| ataatcagaa | aatttgaago | caaattgaac | aaatggaacc | : acagaagcat | ctctatggct | 240 |
| ggcagaatta | ccttaatcaa | tgctgtcttg | acagctntgc | : ccttgttnta | . tatgtctttn | 300 |

| • | | | | | | |
|------------|-------------|--------------|------------|------------|------------|-----|
| ttcagggccc | cttcagcagt | catcaagagg | ctcactacta | tccaaagaca | atttctttgn | 360 |
| ggtggaaact | tggaaggaaa | aaagatagct | tggatctcat | ggcagcaagt | gtgtgctcct | 420 |
| agagaaa | | | | | | 427 |
| • | | | | | | |
| <210> | 4767 | | | | | |
| <211> | 231 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | C | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 4767 | | | | | |
| tagaggatgc | aagcttgaga | tgaggaagtg | gtgaagggag | attctttctg | ctcttattgn | 60 |
| tgaccacaca | gtggtacctg | gagatatgtc | gngggggtca | agagaccttg | gggacgtcaa | 120 |
| | | | | | | |
| gtggggtgct | attggccaaa | accaagcttg | accaatcccg | accaacccgg | gcataatcgg | 180 |
| tcacggagaa | cctgtgatgt | acctaaccag | gcgagcttct | ggcagtcaac | a | 231 |
| | | | | | | |
| <210> | 4768 | | | | | |
| <211> | 450 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | × | | | | |
| <400> | 4768 | | | | | |
| cgattgtcac | gtgctcatgc | attatttgtt | atccgtggct | atacgagaca | tcttgccaaa | 60 |
| caaagacagg | ttagcaataa | ctcgcctgtg | ctttatcttc | catgctatat | gtagcataga | 120 |
| | | | | gcaattatac | | 180 |
| | | | | | | |
| ggagatgtat | tttccccctg | ctttcttaga | catcatgatt | cacttgattg | cgcatctggt | 240 |
| cagagaaatc | aaatgctgtg | gtcctgttta | tctacggtgg | atgtacccgg | ttgagcgata | 300 |
| catgaagatc | ttaaaaaggt | atacacagaa | tctatatcgt | tcacaagcat | ttatcgttga | 360 |
| gaggcacatt | gcagaagaag | ccattgaatt | ctgtctgact | acttacagaa | tgctaaacct | 420 |
| attagacttc | ttgagtctct | gcatgatgac | | | | 450 |
| geeggaeeee | cegageeee | goulgulgue | | | | |
| <210> | 4769 | | | | | |
| <211> | 317 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | × | | | | |
| | | | | | | |
| <400> | 4769 | | | | | |

| gactaggcgg | cggtcggacg | atggcgcaca | acatggttgc | cacatccaca | atgcgcgcat | 60 |
|------------|--------------|--------------|--------------|--------------|--------------|-----|
| aaactgacca | tcccctgtcg | cccacctgca | actgagctca | cgtactccca | cgtagcccat | 120 |
| atcctcgatt | ctatcaacac | cgggtcccaa | tcaatactcc | caagcttcca | cagcatccaa | 180 |
| gcaaaacaac | attcttacag | cacaagctat | cgcacccaag | caagactgag | cataggaaga | 240 |
| aaactgtgct | caacacatca | accaaaatca | caggtcttct | cacttaatga | ccacaggaac | 300 |
| cattccttcg | atccaat | | | | | 317 |
| | | | | | | |
| <210> | 4770 | | | | | |
| <211> | 471 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 4770 | | • | | • | |
| | | | | attatataat | agggaaattt | 60 |
| ntgcggatnt | ggtcttcgcc | agtgaaagga | tegatgtgtg | gttctataat | aggeauacce | |
| gatcatccta | ctacgacgac | tgagaacaat | ggggctaata | aagagggtga | ggatgaggga | 120 |
| gaaacccatg | ctgtgactgc | cattcctgta | ccgccaagtt | tcccaccaac | ccaacaatgt | 180 |
| cattactcaa | cccttctcct | tacccaccgc | ccagttatcc | acaaaggtca | tccctaaatc | 240 |
| gacaacaaaa | cccacctacc | acacaaccaa | tgctaaacac | cacctttggc | acaaaccaaa | 300 |
| acaccaacca | agaaatgata | tttgcagcga | aaagcctgta | ggattcaccc | caaattccgg | 360 |
| tgtcatatgc | taacttgctc | ccatatctac | ttgataacgc | aatggtagcc | ataaccnctg | 420 |
| ctaggttccc | tcacaccccc | atttttctga | tgatatgact | cgaacgcaac | a | 471 |
| | | | | | | |
| <210> | 4771 | | | | | |
| <211> | 461 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <400> | 4771 | | | | | |
| ccaagcttag | cggacagggc | cgactaaccg | g agttcatcca | a aaaaaccaga | aaatcaacat | 60 |
| aaattgatga | actcgcttag | cgcacaggcg | g cgcttagcga | a gcacatcgaa | atttccagaa | 120 |
| aacttgggg | : ttttcagccc | : cctaccatag | g gcctctgtta | a ggcctcaaaa | cctaatcaaa | 180 |
| acaacacaa | ı agcatgtaca | ttatgtgcga | a aaataaacco | c ctaacaacat | . agcatctaaa | 240 |

| gactaaccta | actgtaacat | tgcaaagcac | aaaatcaaag | ctttaaacta | gctacagtag | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tcttctatcc | taaggttcaa | agcaaaaata | aaagtgaaga | gttgagaaca | cttacttgga | 360 |
| ttgcagagaa | gattaagcac | gaggaagcac | agagaagcag | agaatacaat | ggaagcacaa | 420 |
| tgcagatgag | tgcaagagta | agtgagaaat | gtgtatgtaa | t | | 461 |
| <210> <211> <212> <213> | 4772 447 DNA Glycine max | · · | | | | , |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tgctctacat | tacattgatg | tttgtattta | ttggaggatg | ttgtatgcca | ttnttgtttt | 60 |
| aagggtagca | tttcttggta | aaactaactt | tccaaatgtt | tgcattcgca | ggaaacggcc | 120 |
| ccgaggaagt | gatgcaatcc | taccccccaa | gggcattgga | tagaacactc | caataagatt | 180 |
| gggccaaaaa | tgcaagagaa | ggccctaggg | ttctcatgag | ccttagggta | gatttctgag | 240 |
| cccatgggcc | aaggttgggt | ccaattatct | ttgtacatat | tagactagga | tgtcattata | 300 |
| tttggtcctt | gtatttaggg | atccatattg | taggtagggt | accctagaaa | tataggattn | 360 |
| ttcagccctt | gtatttttgg | gcacctagac | tagttnttgt | attaggggta | gttntgtaat | 420 |
| ttcacatgca | ctaagtggat | atttgat | | | | 447 |
| <210> <211> <212> <213> | 4773 518 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ntttganncc | cttggacntc | gcagcacctg | agatcctatc | tagacgacct | gcangcttgc | 60 |
| aagctctaaa | cagactttca | aaattaacat | tttgtgcgac | taaggaagca | taatctggta | 120 |
| cttgaaccga | gcggtcgctc | aaacgatgat | gcctcattaa | ctatatttac | atgtataggg | 180 |
| actgttttac | aacgcacttt | ggaaagatta | ttgcgctcgg | gtatgcaagg | ctcaaatatg | 240 |
| atttttgtaa | ctggaagaga | gatatctcta | cgtccataaa | gtgcagctac | ctgtcatcac | 300 |
| cattcattaa | cccaattgct | ggccaatgtc | tatcttaaca | tattcttcta | gcacattatt | 360 |

| cataacaggt | ctgaacattg | taaactcatg | accgccacta | ctaacaatag | agctctattg | 420 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tcattcattn | gcacaactct | taactaacca | tgcgatccga | cgcgtactat | cacctctttt | 480 |
| gtactaatgg | cggctcatgt | taaagatcta | cacgcacg | | | 518 |
| <210> <211> <212> <213> | 4774 346 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tgtactatng | gtcatatgca | tatgatacaa | tcaaagcctt | ctcttcacca | accaggattc | 60 |
| cgaatgcttg | cagtgcaaac | accgctgata | tcaacgctcc | gcgcgtcttg | ttgctggcat | 120 |
| atttatacat | gattgtggct | gaaagagggt | agtctccacc | gatggcaaac | gctagacaga | 180 |
| atctgaagaa | gcatagagag | gccatgacac | cctgtggagc | tgacccacag | gagagttgct | 240 |
| gggcaaggga | ccacactacc | atgagaatga | gcgttagtgc | ccatactcta | tatctcccca | 300 |
| tttaggcacc | aagccaacca | aataataatg | gtccgtatta | tgcgcc | | 346 |
| <210><211><212><213> | 4775 174 DNA Glycine max | ς. | | · | | |
| <400> | 4775 | | | | | |
| agcttcaccg | gatgatgccg | atctatcatt | ttctattcga | catcatacaa | ctgatattca | 60 |
| gggaatgaat | agaataatca | ctgcgcggtg | tcggtcgtta | tatggaccag | aatgatatct | 120 |
| gtcagccgac | attgcgcaat | ttgttttaca | aacgctagcg | ataatggatt | tttt | 174 |
| <210> <211> <212> <213> | 4776 251 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| atactcacct | gctctanatt | acattgatgt | tagtatttat | gggacgttgt | atatgccatt | 60 |
| ngcgctccaa | gagtaacgtg | ccactgtgaa | aactaactct | tccaatgttt | gcctccgcag | 120 |

| gaacggttcc | tatgaatctg | gactcctata | ggtgcaggac | cgacaaggcg | ggcgaaggaa | 180 |
|----------------------------------|-----------------------------------|------------------|------------|------------|------------|-----|
| ctacctctcg | cccggagtac | tacagtcacc | gctttaagag | cgttgtacac | cagcagcgct | 240 |
| ttgaagccat | С | | | | | 251 |
| <210> <211> <212> <213> | 4777 155 DNA Glycine max | ς | | | | |
| <400> | 4777 | | | | | |
| gtatcaaagc | ttatcttatc | cagattttag | tccatccgga | gtttatttta | tcgagaattt | 60 |
| atgtgcggct | agattttatt | gcggccggaa | tttattttat | gccatcctat | cctattgtgc | 120 |
| ccagatttta | ttttatttcg | attatgggcc | tggac | | | 155 |
| <210> <211> <212> <213> | 4778 415 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tctaccntat | caggatatat | aggcgactgt | aatgacatat | tatgtatgtt | acctacgttc | 60 |
| tgaacggctc | gaatgctatc | aaaggcttca | tcagataaga | attccatatc | aataaactta | 120 |
| cggtcgatta | tggaacgagc | tgagaaaaga | tttgcgtacc | gattctacta | ttcttctgaa | 180 |
| gaaaacaatg | gggaagatga | caatgagggt | ggaattggtg | ctgtggatgc | gctagcggct | 240 |
| ccggaacgat | gagctcttga | agccgaagcg | gacgcggaag | aaccctttcg | tttctttgac | 300 |
| gattctgcca | ttcgaaggag | accctgcaga | gtccaatcgg | cgagatcaat | ataaaaatga | 360 |
| actagatgaa | gatggcaatt | tacgggagtt | gattcgatga | agaaatgagt | gagat | 415 |
| <210><211><212><213> | 4779 230 DNA | | | | | |
| | Glycine max | ĸ | | | | |
| <223> <400> | - | x all n locat | ions | | | |

| atttgtgttt | agcttgtatt | attggttttg | aagaacaccc | tttgctacaa | gtcaaacaat | 120 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tatacttggt | gatagggcca | ttagggtttt | tcttcaccct | aaacacctat | ttacaaccaa | 180 |
| ttggatccct | acatggaggc | agttcagtaa | gaganaatga | accatttttc | | 230 |
| <210> <211> <212> <213> | 4780 449 DNA Glycine max | · · | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tatcgnttag | cctaattcag | atcaaattgt | tatgggctta | tctcatnctt | ggccagctta | 60 |
| gtggaccaaa | tcagcctgag | atgcaagggt | taagcgctaa | gcgccagaga | ctctcggctt | 120 |
| agcgcatgac | caaagatgcg | cttagcaaaa | ggactgtgtt | tcagaagaag | aaaaattcta | 180 |
| agttatttt | cagtcccttt | cttaagaaat | tgaaactctt | atatctatca | tttaaaaaca | 240 |
| agctgatata | ccccaatgta | atgattatga | agcaagttcc | acatgatata | ctgcataaaa | 300 |
| tgcagagata | acagaaatta | aaactgggtt | gcctcccagg | aagtgcttct | ttaacgtcat | 360 |
| tagtttgaca | cgtttacatc | catgggtgat | caaatgcaca | gagctatgtg | ctcttgtgaa | 420 |
| ttcttcacca | tggtacagtt | tcaacctct | | | | 449 |
| <210><211><212><213> | 4781 372 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 4781 | all n locat | ions | | | |
| caagcttgta | ccaaaaacaa | aaaattntnc | taatttaaat | tacatgacaa | tgagatcgct | 60 |
| atataagata | ctacaaagat | cacattttac | aaaagattca | tatttaaata | cccatttttg | 120 |
| gcgtttttt | tttcaagggt | gtggcattgc | cgagagacaa | tggagggtga | ccatttctca | 180 |
| tgtttggacg | tcaaagaacc | cataaacatt | attcccgttc | tccggttctg | tcaaataaca | 240 |
| gctaaaaaca | aagccagaaa | atccaaaaaa | aataggaaag | tgaccttttt | tcatgttcaa | 300 |
| gtacccatgt | ttgggaattt | tctccgtagg | tgtggcagtg | ccgtgagaca | atggagggcg | 360 |
| gccatttctc | at | | | | | 372 |

| <211> <212> | 4782 173 DNA Glycine max | : | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 4782 | | | | | |
| catgtagaag | agtgataact | cttagtaaaa | cctaacacca | tttcgaacac | tgctaaacct | 60 |
| ttcgaacagt | tacatcttta | ggtctattca | taaacaagca | ctggtactcg | attaccaaat | 120 |
| tacagtgact | gattacacac | tgctttgaaa | cgaaaggatg | tgactcttca | cct | 173 |
| <211> <212> <213> | 4783 453 DNA Glycine max | τ | | | | |
| | | catgacccgg | attagttgta | tatctgtatt | acggctcagc | 60 |
| | | ggctatcatt | | | | 120 |
| | | tggattatct | | | | 180 |
| | | tgttgacctt | | | | 240 |
| | | cttgttaaaa | | | | 300 |
| | | attgttgagg | | | | 360 |
| | | gttggactaa | | | | 420 |
| | | ggcgccacat | | , | | 453 |
| ceguegeegg | accegacoae | 99090000 | J | | | |
| <212> | 4784 470 DNA Glycine max | x | · | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tactgcgacg | agtgcgcttc | ttgaaagaat | accggaaccg | tactcacggc | tctgtataac | 60 |
| gncaccgggc | tgcagcgtat | tctccattcc | acaatctgca | acagatacaa | acacaaaatc | 120 |
| acatttcact | cttaaaaccc | taaaccctaa | acacacactg | ttaacattgg | caaataaggt | 180 |
| aaacgataaa | cgcaattagg | tcaaaaagag | ctgcgattag | ataagaaacc | tccgcatatg | 240 |

| tagctgactg | gctcaagctg | aggatccatc | gctggttcca | gcgaggtgta | aaggaagaaa | 300 |
|-------------------------|--------------------------------------|-------------------|------------|------------|------------|-----|
| gttctaagct | ntaaccttta | gctntctgct | caacgaagaa | aatgtaaagt | ggctcagaat | 360 |
| cagaggctct | aaaacgaagg | attgtgcttc | atcttcagct | cttatgggcc | caaattcgca | 420 |
| acttacatgt | ccaaaaccga | gaagcctctc | tattctgtat | ttctttttac | | 470 |
| <210> <211> <212> <213> | 4785 463 DNA Glycine max unsure at a | k all n locat: | ions | | | |
| <400> | 4785 | | | | | |
| agcttgttng | cattnggtcc | cacttatgaa | atgactatat | tttaataata | agctaattag | 60 |
| agttattaga | tagatatatt | cggccgtttg | tgtagatggg | aaggatgaga | ttctgaataa | 120 |
| agcttccttc | tgggcttaca | aaggaaggga | ttcatgatta | ttgatcatca | tcatcaatat | 180 |
| tattatttct | ttttgaagac | aaatctagaa | gccaaatttt | tcttccagtg | gaccctaccc | 240 |
| tctttcttct | ccaaaatgtt | gctcacatag | gaggaatttg | gttggagggc | tatacgatgt | 300 |
| ggggacaaat | cacttgcact | ttggtgatca | atgatcagtg | atcacaaacg | caaaaacaaa | 360 |
| ttacaaccgc | ttatatggtt | tataaaatca | tgcatgtcat | tcttctttt | acagtctatc | 420 |
| atgtgtgctc | ttcattcata | cactaactga | gtacatacta | ctc | | 463 |
| <210> <211> <212> <213> | 4786 449 DNA Glycine ma: | × | | | | |
| <400> | 4786 | | | | | |
| gtaaatgctg | tgaaacttat | tcatatccgt | tttcttggaa | attgtgtcat | tgaacttctt | 60 |
| ggcgtggatc | ttccaactgc | atatcaacat | gccttcactt | acatccggca | actggctaca | 120 |
| attttaaggg | aggcacttaa | tacaaagact | aaggtgctgt | ttatttgtcc | agtacatgtt | 180 |
| attttcttat | taggcactgt | aagaagtgcc | ttgaacttat | agttatccta | acaaactggt | 240 |
| tatatatgga | tattaattac | tggcccttag | ttcttacaag | tttggcatgt | ttttctatat | 300 |
| ttgtctgtta | aactggttct | ttaaccttgc | atgtaaaacc | ttcaaagttc | tgttatttgt | 360 |

<210>

4789

| ctgttacagt | tactaggcac | tcttgattat | tgttgaaaaa | ttagaggcac | tcataaacct | 420 |
|----------------|-------------|--------------|------------|------------|------------|-----|
| - | tgttgatagg | | | | | 449 |
| cccacgccgc | 0900540-55 | J | | | | |
| <210> | 4787 | | | | | |
| <211><212> | 462 DNA | | | | | |
| | Glycine max | ζ | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 4787 | | | | | |
| agcttgcagg | attatggngt | acccatcaca | attggtacta | tgtggcgttc | gggcgaaggn | 60 |
| gcaagacaac | tcttcacatn | cacaaatcac | acataaagcc | accatcccca | gctggccacc | 120 |
| ttaactgagc | tcacatactt | tcacggaccn | cttaatctcg | gtcctctcaa | tgccgggtcc | 180 |
| ccatcaattc | ttccaagctt | tcaaaacatn | caagtaattc | aacatccaaa | catcatgaac | 240 |
| tatcaaagcc | aagaaaacaa | ggcagaggca | aaaaactctg | cccaaaacac | aaaccaatat | 300 |
| | | | | cgttccaatt | | 360 |
| | | | | | | |
| tggatcgact | caaaactttt | actggaagtc | tctagtacat | aagtctacat | tttgaccgtt | 420 |
| gggatctgcg | attaaatgtn | cagaacccaa | tatgtactac | CC | | 462 |
| | | | | | | |
| <210> | 4788 | | | | | |
| <211> <212> | 409 DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 4788 | | | | | |
| atgctttaat | cagtgttttc | tctaactcat | cttttcttta | aatcaacctc | ccggtgtcaa | 60 |
| aaatcacttg | atccatgaca | tgcactctaa | aatactttgt | cttatgttta | aggtgtttca | 120 |
| tggaaataca | ttaaactgta | cttcatcatc | ttgtaccttg | acagtgagtg | ttccatcatc | 180 |
| cacatcaatc | acaactttag | aaatcttgat | gaaagatcta | ctaagaatca | attgaacttc | 240 |
| attgccttca | tccatatcca | tcactgcaaa | gttgactgga | aagacagatt | tgtcaacttt | 300 |
| tatcaataca | tctacaacaa | tgccataagg | aagctgtgtt | gttctgtcag | ctaactgcaa | 360 |
| acccatcctt | gntggtctga | tttcaacttc | tcctatctgc | ttgatcatg | | 409 |
| | | | | | | |

2027

| <211> <212> <213> | 384 DNA Glycine max | | | | | |
|---|---|--|--|--|--|--------------------------|
| <223> <400> | unsure at all 4789 | n locati | ions | | | |
| agcttncatc | anaatctacc tta | ttatata | acttagagat | cttgnttcat | ctgttcttgc | 60 |
| gattccacct | tttctcatat cat | tttgcat | gtttttgctt | tctgtcttga | atggnataga | 120 |
| ggtgagggtc | gattctttga gga | tcctaac | gagggtttga | taatcgattn | tgaccgagaa | 180 |
| gtaagtcaaa | caataaacga aga | agaggaa | gaggacgtcc | tttcaccaaa | gttggagagg | 240 |
| ttgatcgctc | aggaagaaca cga | aatgaag | cctcaccaag | aggaaaccga | actgataaac | 300 |
| ttagagaccg | gagagggaaa gaa | agaagtg | aaagtaggaa | ccagtatgat | cgcacctatc | 360 |
| cgccaaggtt | tgataaccct tct | t | | | | 384 |
| <210> <211> <212> <213> | 4790 357 DNA Glycine max | | | | | |
| | | | | | | |
| <400> | 4790 | | | | | |
| | 4790 gaaagtgttg aat | gaattaa | ttgatctaac | ttgcaaaaca | aagccttgct | 60 |
| aatgaaagta | | | | | | 60 120 |
| aatgaaagta tttatagact | gaaagtgttg aat | caagaag | atcatttaga | agagttatta | cttttagaaa | |
| aatgaaagta tttatagact aacttataac | gaaagtgttg aat | caagaag tccaaaa | atcatttaga ccttttgaag | agagttatta agttacatct | cttttagaaa | 120 |
| aatgaaagta tttatagact aacttataac tcagaaacag | gaaagtgttg aat cttcgtgtct ggt caattcgaaa aag | caagaag tccaaaa attacca | atcatttaga ccttttgaag aattagtgta | agagttatta agttacatct attgattaca | cttttagaaa tttgatttat caaagctttt | 120 180 |
| aatgaaagta tttatagact aacttataac tcagaaacag aagtgaaagg | gaaagtgttg aat cttcgtgtct ggt caattcgaaa aag ccactggtag tcg | caagaag tccaaaa attacca cctttga | atcatttaga ccttttgaag aattagtgta atttgaattg | agagttatta agttacatct attgattaca caacattcaa | cttttagaaa tttgatttat caaagctttt gggcactgat | 120 180 240 |
| aatgaaagta tttatagact aacttataac tcagaaacag aagtgaaagg | gaaagtgttg aat cttcgtgtct ggt caattcgaaa aag ccactggtag tcg atgcgactct tca | caagaag tccaaaa attacca cctttga tcgatta | atcatttaga ccttttgaag aattagtgta atttgaattg cagctttttg | agagttatta agttacatct attgattaca caacattcaa | cttttagaaa tttgatttat caaagctttt gggcactgat | 120 180 240 300 |
| aatgaaagta tttatagact aacttataac tcagaaacag aagtgaaagg aatcgattac <210> <211> <212> <213> | gaaagtgttg aat cttcgtgtct ggt caattcgaaa aag ccactggtag tcg atgcgactct tca caaaacattg taa 4791 240 DNA Glycine max | caagaag tccaaaa attacca cctttga tcgatta | atcatttaga ccttttgaag aattagtgta atttgaattg cagctttttg | agagttatta agttacatct attgattaca caacattcaa | cttttagaaa tttgatttat caaagctttt gggcactgat | 120 180 240 300 |
| aatgaaagta tttatagact aacttataac tcagaaacag aagtgaaagg aatcgattac <210> <211> <212> <213> <223> <400> | gaaagtgttg aat cttcgtgtct ggt caattcgaaa aag ccactggtag tcg atgcgactct tca caaaacattg taa 4791 240 DNA Glycine max unsure at all | caagaag tccaaaa attacca cctttga tcgatta n locat: | atcatttaga ccttttgaag aattagtgta atttgaattg cagctttttg | agagttatta agttacatct attgattaca caacattcaa aaaataattg | cttttagaaa tttgatttat caaagctttt gggcactgat gaacttt | 120 180 240 300 |

| gtcaaaatag | gtgcagcagg | attttggctc | tgtgcagaaa | aatgcttgtg | tggttggctg | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tggaaagagc | agtacagaat | gagttctgga | tgtctgctag | taaatcccaa | cggtcacaat | 240 |
| <210> <211> <212> <213> | 4792 438 DNA Glycine max | · « | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ntgaaggtgc | gtagcccacc | attntccata | gtagaatact | gttaatgtgt | ctactatcat | 60 |
| tgtcatcgtt | ttttcgtcat | tgaggtgcca | cttgagctgc | caggttctcc | acctttgggc | 120 |
| gtattctttg | aaagatcggt | gcccctttt | ttgcacatat | tntgtagttg | catcctatcc | 180 |
| gaagccatta | taccgacact | gcctaacgaa | ggcaaccatt | aggtcctccc | aggaatggac | 240 |
| tcgggaaggt | tccaagttag | tgtaccaggt | aacaactacc | ccagtaagac | tttcttggaa | 300 |
| ggaatgtatc | aacaattcct | catcttttgc | gtatgccccc | atcttctgac | aatacatctt | 360 |
| tagatggttc | ttggggcaag | taatcccctt | gtacttgtca | aagtccagca | ccttgaactt | 420 |
| gggaggggtg | atgatatt | | | | | 438 |
| <210> <211> <212> <213> | 4793 263 DNA Glycine mas | x | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| agctnttgac | ggactatacc | aagctctagg | ttctttgacg | gagaaagatc | tatatatagg | 60 |
| cttgctaagg | gtagagagag | gaagactaga | gatttggatc | aagtaaagag | tgttaaggat | 120 |
| gaagaaggca | aagtcttagt | gcaggaaaga | gatatcaagg | aaaggtggaa | ggcgtatttc | 180 |
| cacaacttat | ttaatgatgg | atatggatat | gactctagcc | agctacaccc | accagaatag | 240 |
| gaccggaact | ataagcacta | tcg | | | | 263 |
| <210><211><212><213> | 4794 423 DNA Glycine ma: | × | | | | |

| <223> <400> | unsure at a | all n locat: | ions | | | |
|---|--|---|--|---|--|---------------------------------|
| tgttgctcat | atattgagtg | tgtgattaat | tgnttgtgta | tatgggtttg | atggaaccaa | 60 |
| catttatatt | agttgagcat | ggttgctggt | ccttgtttgt | aggggctgtt | gtagcctatg | 120 |
| tagataattt | ccggcttgta | gataatagct | gggagcttat | agataatgtt | aaagataaaa | 180 |
| atttgcttat | agataaaagg | tagaagataa | ttgcaccttg | tagataatgt | gtaggctcat | 240 |
| agataattaa | atacctgtca | atagataaga | tattcaaata | catttgaata | ttagcaggct | 300 |
| agagataacc | tgtatgttgg | ggagtccggc | tgctaagggc | cacgcatctg | cactcctgtt | 360 |
| gcaaggctag | cgtataggag | tgacacgtgt | ctctgactgt | catgtangtc | ctagacagta | 420 |
| cat | | | | | • | 423 |
| <210> <211> <212> <213> | 4795 441 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ggattctttt | attattgcaa | ccgcgagggc | gcaacanaca | cagacacgcc | cacacgctca | 60 |
| | | | | | - | |
| gtcgcacagg | tgcacacact | | cacttataca | | | 120 |
| | tgcacacact cacacataaa | cactcacact | | catacacacg | actgcataca | 120 180 |
| cagacatttg | | cactcacact | cacttatttc | catacacacg cggacacaca | actgcataca catagaaaca | |
| cagacatttg catattctca | cacacataaa | cactcacact cacattcact cactcacact | cacttatttc | catacacacg cggacacaca aatacggacg | actgcataca catagaaaca cacacactag | 180 |
| cagacatttg catattctca atagaaactc | cacacataaa ctcagagaca | cactcacact cacattcact cactcacact tgtcagatag | cacttatttc ctctctcgtg gcgcacacac | catacacacg cggacacaca aatacggacg acactcgcac | actgcataca catagaaaca cacacactag ttctgtgatt | 180 240 |
| cagacatttg catattctca atagaaactc gaaagacaca | cacacataaa ctcagagaca gaccgcaggc cgctcagaaa | cactcacact cacactcacact tgtcagatag ctcatcacac | cacttatttc ctctctcgtg gcgcacacac actcatagag | catacacacg cggacacaca aatacggacg acactcgcac actcataccc | actgcataca catagaaaca cacacactag ttctgtgatt | 180 240 300 |
| cagacatttg catattctca atagaaactc gaaagacaca acatgctcgc | cacacataaa ctcagagaca gaccgcaggc cgctcagaaa | cactcacact cacattcact cactcacact tgtcagatag ctcatcacac tcacacgacc | cacttatttc ctctctcgtg gcgcacacac actcatagag | catacacacg cggacacaca aatacggacg acactcgcac actcataccc | actgcataca catagaaaca cacacactag ttctgtgatt acatacagac | 180 240 300 360 |
| cagacatttg catattctca atagaaactc gaaagacaca acatgctcgc agacacacac <210> <211> <212> <213> | cacacataaa ctcagagaca gaccgcaggc cgctcagaaa agactcacat acactctctc 4796 474 DNA Glycine max | cactcacact cacactcacact tgtcagatag ctcatcacac tcacacgacc | cacttatttc ctctctcgtg gcgcacacac actcatagag acatagagat | catacacacg cggacacaca aatacggacg acactcgcac actcataccc | actgcataca catagaaaca cacacactag ttctgtgatt acatacagac | 180 240 300 360 420 |
| cagacatttg catattctca atagaaactc gaaagacaca acatgctcgc agacacacac <210> <211> <212> <213> <223> <400> | cacacataaa ctcagagaca gaccgcaggc cgctcagaaa agactcacat acactctctc 4796 474 DNA Glycine max unsure at a | cactcacact cacattcact cactcacact tgtcagatag ctcatcacac tcacacgacc g | cacttatttc ctctctcgtg gcgcacacac actcatagag acatagagat | catacacacg cggacacaca aatacggacg acactcgcac actcataccc cctctcacgc | actgcataca catagaaaca cacacactag ttctgtgatt acatacagac | 180 240 300 360 420 |

| atgtgatgcc | tictggagtgg | gagttggagc | tgtattgtta | caaggtgggc | accctattgc | 120 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | | | • | | | 180 |
| | | | | cccacctatg | | |
| ttatgcctta | ataagagccc | tccaaacttg | ggaacattac | cttgtttcca | aggaatttgc | 240 |
| cattcatagt | gatcatcaat | cacttaagta | cattagaggg | caaaacaagc | taaacaaaag | 300 |
| gcatgcagaa | tgggtagagt | acctatagca | attttcatat | gttatcaaat | accaaaaggg | 360 |
| aacaacaaat | gtggtagctg | atgccctatc | tacgagacac | acattgtntt | gctccctang | 420 |
| agctcaaatt | ttaggatttg | atcatatcan | ggacttggat | gctttagatg | aaca | 474 |
| <210> <211> <212> <213> | 4797 341 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttgtaat | cgattacaca | tatactgtaa | tttattacca | gaagagagtt | tcagaanaca | 60 |
| ttctcaacag | tcacatcttt | ttgtgtgatt | cttgaatggc | tatcataggc | ctatatatat | 120 |
| gtgacttgag | acacgaattt | gataagagtt | tttcaaaaca | aaaaggtctt | atcctcttat | 180 |
| aaagagaaat | cgttttatcc | tcttacaaat | tccttggcca | aattacttgt | gattcaataa | 240 |
| ggaattattt | gagtgctcac | attgttcaat | ctatctcttt | caagagagat | ttcttcttct | 300 |
| cttcttcttc | attntgaana | gggattaaga | gaccgagggt | С | | 341 |
| <210> <211> <212> <213> | 4798 451 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| tctacaataa | anatccatat | ccttatgcnt | ttataagtaa | cattcaaagg | taaactataa | 60 |
| catgttttta | tttatagttt | aattcaatgt | ccaacgcgtt | gttataaaac | aagtgtctat | 120 |
| ttttttttg | tgaaaaccaa | cacccatgta | ttgtatactc | ttacacttcc | gtattgacat | 180 |
| aactaactta | acataaatga | tttatattct | gttagtgaac | gtccactcga | ttgacttgca | 240 |
| catgatatco | atcttgaggt | tgattctctc | gctagaacat | tctattattt | gaatttttcc | 300 |

| tcttgatgta | tggattgact | tgcacatgat | aacctctgga | tttcaagtta | tgtgctctta | 360 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| cagacaaaaa | aaaaaagaa | ttatctacaa | gagcaacaat | agtacaagta | gtggaagtag | 420 |
| agaacgtgcc | tatagcaaaa | aacactatac | С | | | 451 |
| | 4799 293 DNA Glycine max | ς | | | | |
| <400> | 4799 | | | | | |
| gcttagagaa | aactttcttg | agaagcaaga | tcttattaac | tctcacccat | ctaagaacta | 60 |
| agctcacctg | catgagaagg | tcacttgaga | agctagagct | tagctacaca | cagcgatcta | 120 |
| aaagctagac | tgacctcctc | gataaatgac | atgataatac | agaagaagtc | cctactacaa | 180 |
| agactactca | aaacggcctg | aaaacagggc | taaaacgcta | tactaataga | atgaccatag | 240 |
| tacgaggccc | gaaagaggga | caaacctatt | ctaatattta | caaagaagag | tgg | 293 |
| <210> <211> <212> <213> | 4800 248 DNA Glycine max | k all n locat: | ions | | | |
| <400> | 4800 | | | | | |
| agcttgaggc | tcaactatgn | atgttcataa | cttattactg | ncgcncaaga | catacaagtg | 60 |
| agcttgtaaa | aaatcttctg | gacttggagt | gatcacatgc | aggcctcttg | aacccttgcc | 120 |
| acccaatctg | tcatcatgcc | gagactcaag | aagaccaaca | ggtttagcct | tctaatatat | 180 |
| tctgaacaaa | attcaacggc | ttcttatgca | atgcactctt | caacaataga | tgcttctaga | 240 |
| cgatatag | | | | | | 248 |
| <210> <211> <212> <213> | 4801 352 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | · | |
| ngagttntga | | | | | | 60 |

| aaatattgct | gattatcagc | ataactgaca | ttgctctatg | cacatntgat | catcatgctg | 120 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gagctttctc | atctattggc | tttgtcatct | aacctattat | taatatttat | tttgcggaga | 180 |
| ttatccactt | atatatcttc | taacttctaa | atagtcatga | gggattctac | atatttgtaa | 240 |
| acgtatgttg | ccatgaacgt | tttcacaacg | tcaaacaaat | ctctcttgct | ctgaggtaat | 300 |
| aganatcgcc | attcttctct | ccctcaactc | taagctttca | ctttcttctt | ac | 352 |
| <210> <211> <212> <213> | 4802 470 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| catgcaagct | tcctcggtgc | catttcctgc | gaaggcatat | antttttaaa | gttagttcta | 60 |
| ccagtgngac | actactctta | aaacaaaaat | ggcatacaac | ctcccccat | aaatacaaac | 120 |
| atcaatgtaa | aattagagca | agcttatgcg | catatttcct | tacgaacgtt | cacttgcaca | 180 |
| agacattcta | ttaactaaga | aaaaatgcac | ccatatacaa | tcaaggcagc | ttcgttatct | 240 |
| agattattta | catgtacttc | caaggtgtat | tngttactta | catcacacac | atctccttgg | 300 |
| ctaaatttac | atacatgcat | actcaaagca | ttttggggta | ccaaaaattg | cacatgtgca | 360 |
| catcttggta | tttctaatac | ctatacaaac | ttcatgttga | atcttgacta | tctacacaat | 420 |
| aaggtgctac | atttcatgct | ctttttaaag | ttttgctacc | taaagtçgca | | 470 |
| <210> <211> <212> <213> | 4803 502 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 4803 | all n locat | ions | | | |
| ntttggactg | agcagcgaac | ttcgataata | agcttcgagg | tgtgtagccc | accttattta | 60 |
| tagtcgaata | ctgttattgt | gtctactatc | attgncgtcg | gtgtgtcatc | attgaggtgc | 120 |
| cacgtttgag | ctgccaggta | tctcacacct | attggggtgt | attctctcga | aagatactgt | 180 |
| gcgcccccg | tattgcccat | gttatgcagc | tgcatcctat | acgaagacat | catactgaca | 240 |

ctgcctaacg aatgccacca ctatgtcctt ccattaatgt actctggaag agtccagcta 300

| gcgtaccatg | caacgagatc | ccaggaagac | attctcggaa | tgaatggatc | aagtatcccg | 360 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tatattgtgc | gcatgctccc | atcttccgat | aatacatcat | tagatggttc | ttgggcaagt | 420 |
| agtcccctcg | acgtacgcaa | gacgctaccg | gaacttcgtc | gtggatgata | tcggctctag | 480 |
| aacaactctt | tgggttgaaa | cg | | | | 502 |
| <210> <211> <212> <213> | 4804 370 DNA Glycine max | ĸ | | | | |
| <400> | 4804 | | | | | |
| tagtttacac | gaacaaacaa | catgaacaaa | tagattaaca | tggggaatga | ttctagaaca | 60 |
| ataaccgtat | catgattatt | tattttgtta | gagatggtat | acattacttg | tcagtataca | 120 |
| attaactagt | attgcattgg | aagattaaaa | tacaaattat | cttgagatat | atttttttt | 180 |
| ctgacacagt | tgttttttt | atactacatt | attaatgtcg | aatatccata | gactttgtca | 240 |
| aagattagct | cttattagaa | tatttgaata | gccaagtttt | ctcagttaca | ggactcaaac | 300 |
| ctcacatctt | atttaagaag | atcgaattta | gcattacgga | gttattaatt | cttaaacaac | 360 |
| tattcatatt | | | | | | 370 |
| <210><211><212><213> | 4805 462 DNA Glycine max | × | | | | |
| <400> | 4805 | | | | | |
| ggctcaatct | ttacatatga | gtatgctaac | ctatgaaatc | ttaatgtttc | cttattacga | 60 |
| taaaccaaag | agaaggaata | cgggtatcat | atattcgctc | caaaaaaatg | tcaaaagata | 120 |
| ggaaacttac | cacattttga | tgagtgggat | catcttctac | gatagtttca | tatgaagatt | 180 |
| gaatcgaaac | aaagggacaa | atctcaaata | tggattgtgc | atctgctacg | gagtataact | 240 |
| ccatatatag | ccaggtgtgc | tgaacagaac | agtcccatcc | agctcccact | gtctacatga | 300 |
| atccacttca | ttgcgaacca | ttactagaca | ttaatcacaa | gtcatccaac | attgagattg | 360 |
| ctagtgatac | ataggatgaa | gcacggaaaa | cactcagaag | ttcttacact | aatcccgcaa | 420 |
| atagaatata | actttcttta | caaactccac | aacatctctt | ct | | 462 |

| <21 <21 <21 <21 | 1> 2> | 4806 230 DNA Glycine max | τ. | · | | | |
|--------------------------|-----------|-----------------------------------|------------|------------|------------|------------|-----|
| <40 | 0> | 4806 | | | | | |
| agc | tggcatc | attctgtaca | tagccaaaag | agattaatct | tctctaagca | aaaacgggaa | 60 |
| gtt | attaagt | tgtcttcaaa | atgatagaca | agagtaagac | atactttgag | tacaagacaa | 120 |
| ggg | caccttt | acttttcata | tttaagacgt | gtttgagtaa | atagcttagt | atttgttgaa | 180 |
| taa | gttctta | tcacatgaaa | cttatgtata | agtttacagt | gaaggttatt | · | 230 |
| <21 <21 <21 <21 | 1> .2> | 4807 307 DNA Glycine max | ς. | | | | |
| <40 | 0> | 4807 | | | | | |
| aaa | agcttga | gcttgacctt | cttaataaac | aaatcaagtc | gagtcgaatc | ttagataggt | 60 |
| cga | gtcatag | gtccttaaca | aacaactcaa | ttcatttcca | tctctaatgg | ggagagggca | 120 |
| acc | tagtaga | gattctctcc | cttccttatt | tttttttag | aagtaaaatt | cactatacta | 180 |
| aaa | ıtattact | tatcatatac | aacaatcatg | atttttatgt | aaattataat | atttctctat | 240 |
| tga | aaattaa | tgattaattc | ctgaaacatt | gagattactc | aagaaattaa | ttcctctccc | 300 |
| ata | atcta | | | | | | 307 |
| <21 <21 <21 <21 | 11> | 4808 374 DNA Glycine ma: | x | · | | | |
| <40 | 00> | 4808 | | | | | |
| ago | cttatgca | gcatatatat | actatatacc | ttctctgcgc | agcagcagac | tcatacgctg | 60 |
| gct | gacaatt | atgacgtttc | cagcagccga | tacaaccctg | gatggatgaa | tgcccctaac | 120 |
| cto | catatgtg | acaggacctc | acaacaacca | cagtagtctg | gtgcttcctt | acaaaaagct | 180 |
| ggt | gggccaa | gctgaccata | cattcatcca | ccaatccaac | aacaacgaac | ccccggaca | 24 |
| caç | gccaacag | ttgaggcgcc | tccacaagct | ttcctcgaag | aactagtgag | gcaaacgact | 30 |

| atgcacaaca | tgcagtttta | gcaagagacc | agagcctcca | tttagagctt | aaccgatcag | 360 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| atgggacaat | tagc | | | | | 374 |
| <210> <211> <212> <213> | 4809 64 DNA Glycine max | τ | | | | |
| <400> | 4809 | | | | | |
| tgtgctggac | ctggatcacg | cgtctaactt | ctctttcaat | tctatgcgag | ggacgcgcga | 60 |
| ctgg | | | | | | 64 |
| <210><211><212><213> | 4810 388 DNA Glycine max | ς | | | | |
| <400> | 4810 | | | | | |
| agcttaatca | tgaatgcccc | gacttgtcta | tttatttccg | ccaacatact | ttaggtattt | 60 |
| gcactaccac | aacatctgcg | ggactcgctg | tctgacctct | atccatggac | tcacccttca | 120 |
| ggaagacttt | cggaccaggg | atctcgatgt | ccatggatcc | actaccaact | tcattaatac | 180 |
| ttgtttgagc | tggtcaccaa | gtcaaaccat | tggttatgat | actaactgat | gtgaaactga | 240 |
| gggacgagtc | catgcatgga | ggggaaaaca | atgcgtcccc | tgtatcacaa | gtctacttga | 300 |
| cgagtgagtc | catgcacgac | aggctgagcg | acgtgtctcg | tagccatgaa | tcagtggaga | 360 |
| gtggcgatca | aggcactatg | acatgttg | | | | 388 |
| <210><211><212><213> | 4811 453 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| ngatgtcatt | canaacacac | tatgtagacc | taaatgatta | ttttacatgc | attggttatg | 60 |
| taattgtatt | cattatgcga | tataatttgt | tgtaacccgt | tactaaccaa | ttaatattat | 120 |
| caagtactcg | tttggttaag | caaggaaatt | gttggtccaa | caaaaatcat | ttatgcgtgc | 180 |

| aacatacatc | attgtcataa | ttgacaacac | ataatgacat | gcatgcgtct | tacagtttga | 240 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| gtgcgacaac | acattggctg | acttcagtac | acattntgaa | actagcagtc | gttcgacaac | 300 |
| acattggctg | acttgactac | acattagtga | caacacattg | gctgacttga | ctacacattt | 360 |
| acgcgtgtct | attnttttgt | aaacaaaatt | aaacaaaggc | tcggtcacaa | ccatctatat | 420 |
| atatggcaga | ctaggctact | aaatcacaca | tta | | | 453 |
| <210> <211> <212> <213> | 4812 465 DNA Glycine max | k all n locati | ions | | | |
| <400> | 4812 | | | | | |
| ctgaggcatg | caagcttgcc | tgtccgatgc | agcagtattg | atgttccgag | ttatgttggg | 60 |
| gaacggttac | gaacccggaa | tgggtttagg | caaagacaac | ggcggcataa | ctagcttgat | 120 |
| aaatgccaaa | ggaaatcgtg | ggaagtatgg | tttatgctat | aaacccactc | aggcagatat | 180 |
| aaagagaagc | atcgcgggaa | gaaagagtgg | tggtcaaagc | tcgcagttga | gacaagatag | 240 |
| tgaaggaagt | ccgccctgcc | acataagtag | aagctttata | agcgcgggtc | tgggagacga | 300 |
| aggtcaagtg | gtcgcgatat | acgaagatga | tgttccgagt | acattggatt | tagtacgacc | 360 |
| atgccctcct | gatttccagc | taggaaactg | gctagtggag | gaacgccctg | gcatttacgc | 420 |
| aacgagcata | atgtaaacct | ttacgggttt | aanagctcta | tagtt | | 465 |
| <210> <211> <212> <213> | 4813 387 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| acactatgaa | actcagcttc | taaggaagtt | ntcttaagaa | agcttctcaa | ggaagttttc | 60 |
| ttataaaagc | ttctcaagga | aganttctta | agaaagcttc | tcaaggaaģc | tacctagtct | 120 |
| ataaatagaa | gcatgtgtaa | cacttgttgt | aactttgatg | aatgaaagtc | ttatgagata | 180 |
| cacttcaaag | ttccacttct | ttccctcttt | tattccttca | atttcgggct | cccccttct | 240 |
| ctcttntctt | ttcttcatta | aagcatcctc | ttcaagcttc | ttatccaagg | aaattcttgg | 300 |

| tggtgaagct | ccttcttcct | tggcttattc | cctagtggat | ggggccgtcc | ctctcctctt | 360 |
|---|---|--|---|--|--|--------------------------|
| ctcctttgcc | ttccgctgca | tctccat | | | | 387 |
| <210> <211> <212> <213> | 4814 423 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| atcttagagc | acctgcagct | gcagcttggt | agggagggat | gttcattgtt | ctttgcctga | 60 |
| attntggaag | caacgggtgc | aactccgtga | cccgaaacca | catgacccaa | gtactcaact | 120 |
| tgtggttggg | caaatgacca | tttagagaac | ttgagcacga | attggttgtg | aaggagggtc | 180 |
| tcgaatgctt | gctcaagatg | aatgagatgc | tcaggcaatg | tacgactata | aattaaaatg | 240 |
| tcgtcaaaga | aaacgatgat | gaatcgccgg | aggtaaggcc | ggaaaatgtc | attcatggtg | 300 |
| gcttggaacg | acgaatgtgc | gttacacaaa | ccanacggca | tcactttgaa | ttcatagtgg | 360 |
| ccgtggtgag | tgcaaaacgc | agtcttggcc | acatcggatt | catgcatnct | tatctgataa | 420 |
| tat | | | | | | 423 |
| <210> <211> <212> <213> | 4815 461 | | | | | |
| | DNA Glycine ma: | x | | | | |
| <223> <400> | Glycine ma | x all n locat: | ions | | | |
| <400> | Glycine mass unsure at 4815 | | | tatgtattcc | ctgacattnc | 60 |
| <400> ntagtggccc | Unsure at 4815 | all n locat: | acattcctat | | | 60 |
| <400> ntagtggccc ttttgccttg | unsure at 4815 ttaatttgaa atagttcatg | all n locat: . gcaatatttg | acattectat tetgaaggag | agtacttgtt | teegeettat | |
| <400> ntagtggccc ttttgccttg cgctntttgc | unsure at 4815 ttaatttgaa atagttcatg aaagcacttt | all n locat: . gcaatatttg gaaatcaagt | acattcctat tctgaaggag gtaagaaatt | agtacttgtt cttaggcact | tccgccttat agttatatca | 120 |
| <400> ntagtggccc ttttgccttg cgctntttgc tctaaaacaa | unsure at 4815 ttaatttgaa atagttcatg aaagcacttt tgctcctaaa | all n locat: gcaatatttg gaaatcaagt tttaatttca | acattcctat tctgaaggag gtaagaaatt atgcgacgct | agtacttgtt cttaggcact taatgatcat | tccgccttat agttatatca aagactcatg | 120 180 |
| <400> ntagtggccc ttttgccttg cgctntttgc tctaaaacaa cgatttgagt | unsure at 4815 ttaatttgaa atagttcatg aaagcacttt tgctcctaaa gatcccactt | gcaatatttg gaaatcaagt tttaatttca gatcttagga | acattectat tetgaaggag gtaagaaatt atgegaeget tteetetgtt | agtacttgtt cttaggcact taatgatcat aagagattgt | tccgccttat agttatatca aagactcatg ggaattcgta | 120 180 240 |
| <400> ntagtggccc ttttgccttg cgctntttgc tctaaaacaa cgatttgagt ggagaagggg | unsure at 4815 ttaatttgaa atagttcatg aaagcacttt tgctcctaaa gatcccactt | gcaatatttg gaaatcaagt tttaatttca gatcttagga ctcatgaagt | acattcctat tctgaaggag gtaagaaatt atgcgacgct ttcctctgtt aggtctagat | agtacttgtt cttaggcact taatgatcat aagagattgt ccatgcagcc | tccgccttat agttatatca aagactcatg ggaattcgta aagaacaatt | 120 180 240 300 |

| <210> <211> <212> <213> | 4816 521 DNA Glycine max | | | | |
|---|--|--|---|---|--------------------------|
| <223> <400> | unsure at all n locat 4816 | ions | | | |
| atacgagcct | gagacgtcga gacacctaga | atactccagc | tctgagccat | aatcctaact | 60 |
| caccatatac | ctagaccett tgtgatattg | tcaatcctta | ccctcggacg | tcttaataaa | 120 |
| cgaatgaata | tgtcccctct cttaaataag | tgaaggcata | tgtccattca | cagacaaagc | 180 |
| aattcatata | catctcgaat gtttccagtc | caacgctaaa | agagaagaaa | tgactttcct | 240 |
| aattattgag | tgggagaaag cctcactata | ctaaagaatt | tttcctatct | aagaatggga | 300 |
| gacagttcta | cgcacactga agaagacgat | gatgagtgaa | tgatagctcc | tgatcaagga | 360 |
| tcgaaagata | aatagaagaa atgtgcagaa | atgtctttgg | accggacaat | atctgtacaa | 420 |
| tacagaattg | tcaccaaatg aacaaaatag | agggaaagga | aaccaccacc | tgacagtggt | 480 |
| cttcttcctt | tgtnaccaac caaaatcctg | tgcgttggtc | t | | 521 |
| | | | | | |
| <210> <211> <212> <213> | 4817 378 DNA Glycine max unsure at all n locat | ions | | | |
| <211> <212> <213> | 378 DNA Glycine max | ions | | | |
| <211><212><213><213><400> | 378 DNA Glycine max unsure at all n locat | | atgatgcgct | ccatgagagg | |
| <211> <212> <213> <223> <400> gctntgatgt | 378 DNA Glycine max unsure at all n locat 4817 | aaacaacgag | | | 60 |
| <211> <212> <213> <223> <400> gctntgatgt ttggatcaaa | 378 DNA Glycine max unsure at all n locat 4817 aacatttgga gtggttaatg | aaacaacgag aattgctcaa | gagcttccat | tgtttaattn | |
| <211> <212> <213> <223> <400> gctntgatgtttggatcaaaccgagcgtcta | 378 DNA Glycine max unsure at all n locat 4817 aacatttgga gtggttaatg tggagaataa agaccatatg | aaacaacgag aattgctcaa cggacctncg | gagcttccat agttaaaagc | tgtttaattn tatgaccatt | 120 |
| <211> <212> <213> <223> <400> gctntgatgt ttggatcaaa cgagcgtcta tgatatgctc | 378 DNA Glycine max unsure at all n locat 4817 aacatttgga gtggttaatg tggagaataa agaccatatg gatatataat gcgcctcaat | aaacaacgag aattgctcaa cggacctncg ttcgagcgtc | gagcttccat agttaaaagc acgatatagt | tgtttaattn tatgaccatt atgcacctga | 120 180 |
| <211> <212> <213> <223> <400> gctntgatgt ttggatcaaa cgagcgtcta tgatatgctc atcggacctg | 378 DNA Glycine max unsure at all n locat 4817 aacatttgga gtggttaatg tggagaataa agaccatatg gatatataat gcgcctcaat acgagctttc attgttcaat | aaacaacgag aattgctcaa cggacctncg ttcgagcgtc tttgaatcgc | gagcttccat agttaaaagc acgatatagt tcaagagctt | tgtttaattn tatgaccatt atgcacctga ccattgccca | 120 180 240 |
| <211> <212> <213> <223> <400> gctntgatgt ttggatcaaa cgagcgtcta tgatatgctc atcggacctg | 378 DNA Glycine max unsure at all n locat 4817 aacatttgga gtggttaatg tggagaataa agaccatatg gatatataat gcgcctcaat acgagctttc attgttcaat cgagtgacaa cttatgacca gcacgatata ttatgcacct | aaacaacgag aattgctcaa cggacctncg ttcgagcgtc tttgaatcgc | gagcttccat agttaaaagc acgatatagt tcaagagctt | tgtttaattn tatgaccatt atgcacctga ccattgccca | 120 180 240 300 |

| <213> | Glycine max | |
|--------------------|--|-----|
| | unsure at all n locations 4818 | |
| ctcactcgga | ggcccgattc aggcgcataa tatatcgaga ctctcgaaan tgaacaacgg | 60 |
| aagctatcga | gaaattcaaa tggtcaatac ttcgaactcg gaggtcctat taaggtgcat | 120 |
| aatatatcta | gacgctcaaa attttacaat ggaagctcta tggctataca aatggtcata | 180 |
| acttttcact | cgaaggtccg attaaggcgc ataatatatc gagacgctca aaattgaaca | 240 |
| atggaagctc | ttgagcaatt canatggtca taacttgtca ctcggaggta cgactcagct | 300 |
| gcataatata | tcgtgacgct cgaaattgaa aatggaagct cttgagcaat gcaaatggtc | 360 |
| ataacttgtc | ac | 372 |
| | | |
| <210> | 4819 | |
| | 507 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <223> | unsure at all n locations | |
| | 4819 | |
| | | 60 |
| ntgtgctctg | atacactage agannacega neactatega aacteaaget tagatttaca | 60 |
| aagctatgga | aggaaaggaa ttattgtatt gttctctaca acnaggcatc ttaggatact | 120 |
| tgtgcttaaa | ggaaccatct gcacttggag tgtataggta agggaaacca gtggtcactg | 180 |
| actatcttat | cagacacatt ggagctacct acccataccg attgatcttt gatcataggc | 240 |
| cttctgaaac | gaacgtctat ccctctggtg tctctatcta taataacagg gaatcagaaa | 300 |
| cttttgagat | gctttgtttc actccaaggg aactctaaca catcctattg ttgatgcact | 360 |
| atgaaaagat | agttctttct tgtggcagaa ccgagattga aatagaattt catgtgtcag | 420 |
| acatcaactt | agaggatcct gaatatagtc caaggttcta gaatggagaa aatgactatg | 480 |
| acttgactga | tatggatttg tgactct | 507 |
| | | |
| <210> | 4820 | |
| <211> | 412 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <223> | unsure at all n locations | |
| <223> <400> | 4820 | |
| ~ 4 007 | 1040 | |

| | | • | | | | |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| agccttggaa | ggatgcttca | ctgtgttgaa | tatttttaga | gagaganaga | gagagggggg | 60 |
| aagcatgaaa | ttgaacgaag | aacaagggag | agaagttgaa | ttgtgagttg | cgtctcacaa | 120 |
| gactctcatt | catcaaagtt | acaacatgtg | ttacacatgc | ttctatttat | agactaggta | 180 |
| gcttccttga | gaagctctct | tgagaaaact | tccttgagaa | acttctttga | gaaaacttcc | 240 |
| ttgagaagct | agagcttagc | tacacacacc | cctctcataa | ctaagctcac | ctccttgaga | 300 |
| agcttccctg | agaaaattcc | tcaagaagct | agagcttaac | tacacacacc | tctttaatag | 360 |
| ctaagctcac | cttcctgaga | tgagaagcta | gagcttacct | tcacacccct | at | 412 |
| <212> | 4821 434 DNA Glycine max | x all n locat: | ions | | | |
| <400> | 4821 | | | | | |
| ccttcaaact | aagcttggca | ataaatactc | ctacatttat | ttcttcatgc | tttgtatgnn | 60 |
| ggcctcgacc | tttgtcacgg | gaagccggaa | ggtccatatc | accttcttaa | ttgtacacat | 120 |
| ggggcactac | gcccccaaat | gcgcaagtaa | gaagagataa | ttctccgggc | tctcgtgtcc | 180 |
| gtaaaatgca | ttcatatcat | gcatcgcata | agcatctctt | cataacatca | taatggacat | 240 |
| atcctgcatt | tggtcgttat | catattccag | cctcacattt | tgcatgagtc | atggcatcat | 300 |
| catgcatatg | cgttcaacaa | actttttgat | ctgcgaaatc | gcataccata | tgttttcatg | 360 |
| tttgctcatc | cttgcgttnt | cctctacaca | acaaacacaa | aaaaggggga | agcgtgaaac | 420 |
| ttcacactac | attc | | | | | 434 |
| <210> <211> <212> <213> | 4822 407 DNA Glycine ma: | <i>्र</i> र x | | | | |
| <400> | | ٠. | · | | | |
| | | | | | agatttagca | 60 |
| aatgcaatca | ctatatatat | atatatatat | gagagttgct | aatgcactta | catttaattt | 120 |

aaaatttagt ataaatgcat taacaactaa catcataaat ttttgataaa aaaaccaata 180

| atctcttcac | ttataataag | aatatatcgg | taatttaata | tcaattttt | taaaacaatt | 240 |
|-------------------------------------|---|-------------------|------------|------------|------------|------|
| aaaagagtca | taatagtgct | cataaggcac | ttctttcttc | tttttccttt | ctcctcacat | 300 |
| ggtaataatc | atggttcata | attcacactc | taaaaattta | agtcttctcc | gagctaaccc | 360 |
| acttcatcca | tatgaaaaaa | tcttaaactc | aaagtgaata | gcaactg | | 407 |
| <210> <211> <212> <213> <223> <400> | 4823 1034 DNA Glycine max unsure at a | k all n locati | ions | | | |
| cgccgcgcgc | gnnnnnaatg | aatagccgta | agtacnctng | cnngacaccg | tgagaaatac | 60 |
| ttncaaanct | ctctgaggcc | aatgttccaa | aaccgtgaca | atatactttt | agtacctaca | 120 |
| agaangngct | cttattatga | agttccccga | caancntaat | gacaagaact | neggeegeae | 180 |
| atatgtaaca | caccataaag | catcccctgc | ctacatctca | ctaatgggca | nataaacttt | 240 |
| gtgtataaca | aacgtatcag | acctgagtcc | tcgggcaaat | actatatatg | agacgtctcg | 300 |
| ggatagttga | caaaacacta | tatatttagc | agccaatctt | tcaaaacacg | acactttaca | 360 |
| gaactgcggg | cgaaatgatc | caacaaccat | atcgacgtta | aaattatgaa | ttaaacacta | 420 |
| ccccnacccg | ataaatagga | aattgctttg | gcgaggttga | cgaacacacg | tttcaatagt | 480 |
| gaacagaccc | cagttattgg | tttctgcctt | gaaccataaa | attctcatcg | tccaaaagaa | 540 |
| aaccacgccc | ccccaatatg | acttccatgt | caccaccgca | atcttgagtt | cctttcaaag | 600 |
| ccttttatat | atcacaaata | acccgcaaat | ggggacaaac | gccnccgaac | caaaaaagta | 660 |
| atccctgggc | gctgcatatt | cacgtattga | atcgcgaaac | atttctggta | aaatttttga | 720 |
| gaaggggtgc | cccaaaaatg | gcgcctataa | ctttgtaaag | ggaaggtgaa | acttttacta | 780 |
| aacgaggcca | ctgtgttcta | aagggagacg | caataatcga | tntgggtccc | ttcgccatac | 840 |
| gcccaaataa | tttaaaacgg | tggtgtttct | tgggctctct | gtcctaacac | aaaaaaagac | 900 |
| ggtttctctt | ccacacaagt | gcttgcntga | tacaccaaat | ctcttttctc | tttagacttt | 960 |
| tgcggctctt | cccgccatct | ccttaccctg | ttttctagca | aattcgactg | cgaaaatagg | 1020 |
| gcgtcccttc | ttcc | | | | | 1034 |

| <210> <211> <212> <213> | 4824 549 DNA Glycine max | | | | | |
|---|---|---|--|--|---|---|
| <400> | 4824 | | | | | |
| tgcttgtggg | gcttctatgg | aggctggatc | tttgagcttc | aatgaggtcc | tttaatggtg | 60 |
| attttccacc | atggagatgc | aacggaagac | aaaggagaag | aggtgagagg | aggcgccatc | 120 |
| cattaaggaa | taagccatgg | aagaaggagc | ttcaccacca | agatgagcat | tgaataagaa | 180 |
| gcttggagat | gatgcttcaa | tggaggaaaa | gaaagaggga | gagaaagaga | gaggggggag | 240 |
| cacgaaattg | aaggaagaaa | aagggagaga | agttgaactt | tgagttgtgt | ctcacaagac | 300 |
| tctcattcat | ccaagttata | acaagtgtta | cacatgcttc | tatttataga | ctaggtagct | 360 |
| tecttgagaa | gctttcttaa | gaaaacttcc | ttgagaagct | tctttgagaa | aacttccttg | 420 |
| agaagctaga | gcttagctac | acacacccat | ctaaaaacta | agctcacctc | cttgagaagc | 480 |
| ttccttgaga | agctagagct | tagctacaca | cacccatcta | aaaactaagc | tcacctcctt | 540 |
| tgacaaata | | | | | | 549 |
| | | | | | | |
| <210> <211> <212> <213> | 4825 678 DNA Glycine mas | × | | | | |
| <211> <212> <213> | 678 DNA Glycine ma: 4825 | | | | agtggtatta | 60 |
| <211> <212> <213> <400> tcccaagttt | 678 DNA Glycine ma: 4825 ttaagttctt | cctcaaaact | | | | 60 |
| <211> <212> <213> <400> tcccaagttt acaacttccg | 678 DNA Glycine ma: 4825 ttaagttctt tttgcccatc | cctcaaaact ggtttgtggg | tgacaagtgg | ttgaaaataa | caatttagtg | 120 |
| <211> <212> <213> <400> tcccaagttt acaacttccg | DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt | cctcaaaact ggtttgtggg cctccaaaaa | tgacaagtgg tggcttagga | ttgaaaataa | caatttagtg | 120 180 |
| <211> <212> <213> <400> tcccaagttt acaacttccg cccaacttgc | DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt ttggcaaacc | cctcaaaact ggtttgtggg cctccaaaaa atggagtctc | tgacaagtgg tggcttagga acaatctcct | ttgaaaataa acttagagtc tgaaaaacaa | caatttagtg cctatcacta atcagccaca | 120 180 240 |
| <211> <212> <213> <400> tcccaagttt acaacttccg cccaacttgc acaatgctcc tgggaagcat | 678 DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt ttggcaaacc catcaatttt | cctcaaaact ggtttgtggg cctccaaaaa atggagtctc tttacatgga | tgacaagtgg tggcttagga acaatctcct ataaaatgag | ttgaaaataa acttagagtc tgaaaaacaa ccattttaga | caatttagtg cctatcacta atcagccaca aaacctatca | 120 180 240 300 |
| <211> <212> <213> <400> tcccaagttt acaacttccg cccaacttgc acaatgctcc tgggaagcat acaaccacaa | DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt ttggcaaacc catcaatttt aaatggaatc | cctcaaaact ggtttgtggg cctccaaaaa atggagtctc tttacatgga tctaccattg | tgacaagtgg tggcttagga acaatctcct ataaaatgag cttgtttttg | ttgaaaataa acttagagtc tgaaaaacaa ccattttaga gcagccccaa | caatttagtg cctatcacta atcagccaca aaacctatca aacaaaatcc | 120 180 240 300 360 |
| <211> <212> <213> <400> tcccaagttt acaacttccg cccaacttgc acaatgctcc tgggaagcat acaaccacaa atggataaat | DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt ttggcaaacc catcaatttt aaatggaatc caatccaagg | cctcaaaact ggtttgtggg cctccaaaaa atggagtctc tttacatgga tctaccattg atactccgga | tgacaagtgg tggcttagga acaatctcct ataaaatgag cttgtttttg attggcaatg | ttgaaaataa acttagagtc tgaaaaacaa ccattttaga gcagccccaa gagtatacaa | caatttagtg cctatcacta atcagccaca aaacctatca aacaaaatcc tacatgaggc | 120 180 240 300 360 420 |
| <211> <212> <213> <400> tcccaagttt acaacttccg cccaacttgc acaatgctcc tgggaagcat acaaccacaa atggataaat | DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt ttggcaaacc catcaatttt aaatggaatc | cctcaaaact ggtttgtggg cctccaaaaa atggagtctc tttacatgga tctaccattg atactccgga | tgacaagtgg tggcttagga acaatctcct ataaaatgag cttgtttttg attggcaatg | ttgaaaataa acttagagtc tgaaaaacaa ccattttaga gcagccccaa gagtatacaa | caatttagtg cctatcacta atcagccaca aaacctatca aacaaaatcc tacatgaggc | 120 180 240 300 360 420 480 |
| <211> <212> <213> <400> tcccaagttt acaacttccg cccaacttgc acaatgctcc tgggaagcat acaaccacaa atggataaat tttaccttag | 678 DNA Glycine ma: 4825 ttaagttctt tttgcccatc tccacaaagt ttggcaaacc catcaatttt aaatggaatc caatccaagg | cctcaaaact ggtttgtggg cctccaaaaa atggagtctc tttacatgga tctaccattg atactccgga tttacataca | tgacaagtgg tggcttagga acaatctcct ataaaatgag cttgtttttg attggcaatg atgcaatgtt | ttgaaaataa acttagagtc tgaaaaacaa ccattttaga gcagccccaa gagtatacaa cacaaaattt | caatttagtg cctatcacta atcagccaca aaacctatca aacaaaatcc tacatgaggc | 120 180 240 300 360 420 |

| taggcacaca | caattgtttt | cttgaaaaga | aagcttcatg | tctaaaaaac | atttctgaaa | 660 |
|----------------|-----------------------------------|------------|------------|------------|------------|-----|
| aatttcacaa | ttttaaaa | | | | | 678 |
| <211> <212> | 4826 552 DNA Glycine max | ¢. | | | | |
| <400> | 4826 | | | | | |
| atatgttata | tttaatcatt | ttaatatata | atactatata | tggagaaaaa | tacttatttt | 60 |
| aatacataaa | tattaaatta | ataacattaa | atgcaacctt | aatatttttg | tttaaatctc | 120 |
| gtttaaaatt | ttaaatttaa | ttacttaaaa | aatatgtatt | aaaaatattt | tttttacata | 180 |
| tatagttaaa | tataaattaa | aatattttt | tggttaccat | gcaatttata | taaaatattc | 240 |
| acctgcttta | actttaccga | aaccttaaag | tttttattt | ttaaatccgc | aaacaaatta | 300 |
| tatatattag | aagtaagtat | cagagatacc | ttaagaacaa | aatataagcc | caacattcag | 360 |
| caactcggtt | aatcaatatt | aatatctgat | caaaagatat | aagattaatt | tgataaataa | 420 |
| aaattaaaat | ttaagagtga | aaagagaaat | tgtgagttta | aatttctgtc | attaatattt | 480 |
| ctaacaaaac | taataaaata | actcatttac | tgaaaaaaga | acacctcatc | cgattaaata | 540 |
| taaactaacc | са | | | | | 552 |
| | 4827 461 DNA Glycine max | × | | | | |
| <400> | 4827 | | | | | |
| aaactttcta | cttttattcg | ttgaccacag | agcggtacct | ggagatatgt | ctcgggggtc | 60 |
| aagaaacctt | ggggacgtca | ggtggggtac | tattgcccaa | aaccaagctt | gaccaatccc | 120 |
| gacccaaccc | gggcgtagtc | agtccgtgag | aacctgtgac | gtacctaaac | aagtgagctc | 180 |
| ctggcagtca | accgattaaa | gaacaaagac | cacaaagcat | ggaggcttgt | gtggtggctg | 240 |
| gccagctatg | gatcttgagt | gatatctgga | atatggcctt | tggtaatcga | ttaccaaggg | 300 |
| tgggtaatcg | attacaaggc | ttaaaaatga | agacaggaag | ttaagatggc | ctctggtaat | 360 |
| cgattaccaa | ggatgtgtaa | tcgattacca | ggcctagaaa | tgggatcatg | aacgcgagac | 420 |

| agcttctggt | gatccactac cactgctgtg tg | atcgatta c | | 461 |
|---------------------------|-----------------------------------|--------------------|----------------|-----|
| <210><211><211><212><213> | 4828 464 DNA Glycine max | | | |
| <223> <400> | unsure at all n location 4828 | S | | |
| tgtactaact | ttaatcttat aaaaaaaagt aa | gatttgta gcaactta | at cctatgtatc | 60 |
| tttggccagt | agtcccagat taaaaccccc to | cttcataa tggcaaat | at ttggtagaca | 120 |
| actatagact | teceeggeea eccaaattga eg | caagtttt gtccatca | at tttatttaca | 180 |
| ccatcaaaac | tagactttaa agacagtggt ag | ratatcaaa acatatga | gt taaatatgat | 240 |
| taacaaacct | accgataata gtttttgttt gg | rcggctgag gaacaacg | tc agaaagtgaa | 300 |
| ataccccact | tgttggcttc tgccttgaac ca | itgaaatct catcctcc | ag agaagccacg | 360 |
| cccccaata | tgacttccat gtcaccacgg ca | atctgatt ccttccaa | igc ttttatcagc | 420 |
| acactagccg | canatgggac aaacgcccga ac | cgaacaagt aatc | | 464 |
| <210> <211> <212> <213> | 4829 596 DNA Glycine max | | | |
| <400> | 4829 | | | 60 |
| | gatattgtgt atgtaagagt c | | | |
| | aaataggtaa gatagaaatg a | | | |
| | actaagcttg caatcaaaga t | | | 180 |
| | aatttgtttt atttgtacgc t | | | 240 |
| | tttctatctt acatctttta t | | | 300 |
| | ctaaacctta tattagagat g | | | 360 |
| | aaattatttt ttgatttctt t | | | 420 |
| ttctcgttt | g ctcaagttaa aatcggtatt a | tacttgcgt aagccat | caa tgaacttaaa | 480 |
| aatgacaat | gaaatacaac acatgaattt a | ggcaagcag tgatagc | tga aaaaatggag | 540 |

| tatgtgagaa | tgaatgcact | tatatctaga | gggatttttt | actgatacag | atgata | 596 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 4830 515 DNA Glycine max | ĸ. | | | | |
| <400> | 4830 | | | | | |
| tgagatgagg | aagtgttgaa | gggtgaaact | tcctgctttt | attgttgacc | acagagtggt | 60 |
| acctggagat | atgtcgcggg | ggtcaggaga | ccttggggac | gtcaggtggg | gtgctattgc | 120 |
| ccaaaaccaa | gcttgaccaa | tcccgaccca | acccgggcat | agtcggtcag | tgagaacctg | 180 |
| tgatgtacct | aagcaggcga | gctcctggca | gtcaacagat | aaaaggaaaa | aacaagacca | 240 |
| caaagcaagg | aggcttgtgg | tggctggcca | gctgtgaaac | ttgattgata | tgtgagatat | 300 |
| ggtctctggt | aatcgattac | caagggtggg | taatcgatta | caaggcttaa | aaatgaagac | 360 |
| agggggctaa | gatggtctct | ggtaatcgat | taccagggga | tgtaatcgat | taccaggctt | 420 |
| gaaaacggag | tcaggaagct | aagggagcct | ctggtaatcg | attaccagcc | tgtgtaatcg | 480 |
| attacacaga | gggatgggtc | acttgtaatc | gatta | | | 515 |
| <210> <211> <212> <213> | 4831 420 DNA Glycine ma | × | | | | |
| <400> | 4831 | | | | | |
| tgcaagcaaa | ctggatgcgt | tggtcaactt | ggtaacccag | ctggccttga | atcagaaatc | 60 |
| tttacctgtc | gcaagggttt | gtggtttgtg | ctcctctgct | gaccaccata | cagacctttg | 120 |
| cccttccatg | cagcaacctg | gagcaattga | gcagcctgaa | gcttatgctg | caaatatcta | 180 |
| caatagacct | cctcaacctc | agcagcaaaa | tcaaccacag | cagagcaatt | atgacctttc | 240 |
| cagcaacaga | tacaaccctg | gatggaggaa | tcaccctaac | ctcagatggt | ccagccctca | 300 |
| gcaactacaa | caccagcctg | ctccttcctt | tcaaaatatt | gttggcgcaa | ccaaaccata | 360 |
| cattcctcca | ccaatccaac | aacataacca | ccccataaac | agccaacagt | tgaggcccct | 420 |
| <210> <211> <212> | 4832 247 DNA | | | | | |

| .2125 | Glycine max | | |
|----------------|--|-------------|-----|
| <213> | | | |
| <400> | 4832 | | |
| ttgtccatca | attttattta caccatcaaa actagacttt aaagacagtg gg | agatatca | 60 |
| aaacatatga | gttaaatatt attaacaaac ctaccgataa tagtttttgt tt | ggcggctg 1 | .20 |
| atgaacaacg | tcagaaaggg aaatacccca cttgttggct tctgccttga ac | atgaaatc 1 | .80 |
| tcatcctcaa | a agaagccagc cccccaatat gacttcatgt aacaccggaa tc | tgatttcc 2 | 240 |
| tttcaag | | 2 | 247 |
| <210> | 4833 | | |
| <211> | 1127 | | |
| <212> <213> | DNA Glycine max | | |
| <223> | unsure at all n locations | | |
| <400> | 4833 | | |
| ccctgctacg | g cgcggncacc aanacacgta gtatgcgatc gacttactan gc | atctcgcc | 60 |
| cntgagngac | c atcetectit tecteegegn gietacaett eteteigaea gi | catctcgt 1 | 120 |
| actctccant | t cccaacntta ttactactac cccatanatc gccccctcga ca | ancnncnnc 1 | 180 |
| tttggaaaac | c ccgctaggag cntttgngca taagcactcg cggacaanta ct | gcagaaac 2 | 240 |
| aactnntaga | a gacgttccgt actatagcat gggacanaat gctctcggcc aa | acgggctgg (| 300 |
| anaacacngo | c ttaacatggg ctgtctctct atttggttcc tactccagca to | gcagatcgt : | 360 |
| gtcacccct | c ggctaataat gataggtccg gcagtggcgc ggacaaccgg aa | actacagcc ' | 420 |
| ctcgagcggt | t actccatcat aagcagtgcg tgtggactca gtgtgacacc ac | cacgtagca ' | 480 |
| ccggctctg | c aaacacatat actccaccct cggctcccgg cgacatcacc go | caagatcca | 540 |
| ccagactaa | g cctgtgtatg caaactaagg ccggcggaac accctggctt ti | tcaaccgat | 600 |
| tgaacgaaa | a aatggacaac ggcgccctga aggcgtcgtg gcgtgcttgc co | cccgtgaaa | 660 |
| ctatattgad | c acgegagata ttgecetetg aaaacaatta eeactggtgg e | gaatcgatt | 720 |
| accaaggcc | t aaaaatcaac acacggggcc taaaacgaac ctggagattc aa | acaccacag | 780 |
| agatgcata | a aaaaccaggc ttgaaaaacg aaacaagaaa ccaagggagc c | tctgggaat | 840 |
| ccattacca | c cctgggtaat ttaataacaa aaacaaaggg aacccctcac c | aaataacca | 900 |
| ccttgtggt | a tocaaacact googoggoac occacatoga actootaggo g | aacaccaac | 960 |

acgaaaaacc ctgaaaccat tgcaaaggcg gaccacaata cgcctccact caaccccata 1020 tatctccaat atcctcctcc tagcctccta aacccaactg acactcattt tataactctc 1080 gccgaggcta caaccgcaca ctttcaaaag gaaatccacc ccccccg 1127

| <210> | 4834 | |
|-------|-------------|--|
| <211> | 1013 | |
| <212> | DNA | |
| <213> | Glycine max | |
| | | |

<223> unsure at all n locations

<400> 4834

gaagaacgaa gataagngtg aaatagagag aaagaataat anntgtannn cggggaaaac 60 atacgaagga gtnataggtt ntaatacaaa tacnnctncn nncnnncnaa nancaacaag gggtnnnaat gatggntgat ggnacnntgc nnaannnngg nggaanagaa naaaaaanna gagggnnaag gaaaaanaan angaaaaaga aagagggaaa atttgttgat ttattttagg gganaanaga gaagaggaaa agtgtgatta taatatagaa atatttntta tatgtaaaaa 300 atttgggatg gtagagaaaa aaaaaaaggg ttttaaaagt aaaaatagga aaaataaaaa 360 ttaaaaggga aattgagagg ggtgtaaaaa taaaagaaaa gactaaataa tggggtttaa 480 aagaatagac tgaataaaag ggaaataaaa aaaaagatct gaaatttaaa aaaaaaagat 540 ggtgtaaaaa agaaagaata gtggaaatgg aaaaaaagga ataatagaat attaaaaata aaataaaagg aaaaaagggg ggggagtaga agggaaaaaa agaatagtgt atgaaaaaaa 600 ttgggaaaaa aggaagaagg gaagaaaaaa ganaaatgta ggggaaaaaa gaaaaaaata 660 720 tattaaaaga tatgaaagag atggaaaggt aatagaaaaa agtatgggaa ataagaggat ggagggagaa agaagaaggg tgaaaaatta aaagaaaaat ggggtagaaa aggggaaaga 780 ggaaaaaaag gagaaaaggg gtaatttaag gataaaagaa aaaaaggaaa gaattgaaaa 840 gaaaaaggaa ttattgaaag agggatgtaa atttaaaaaa agtagaaaaa ggaaaaaaa 900 gaggcgagga aggaaaagaa gaaaagaata gaatgtaagg aaatggtaaa aaaagtaaga 960 1013 agaaaagaaa gaaaaggagg aaaaaggtta agagaaaaaa gaagaaaagg gan

<210> 4835

<211> 541

<212> DNA

| <213> | Glycine max | | |
|----------------|--|--------------|-----|
| <400> | 4835 | | |
| atatcattct | ctctaaatgg atgctattaa ttacactctt ggttggtaat | tgggataaac | 60 |
| tgtcacttta | attgctcaac ttttaataaa tgttaaattt acttgcttca | atttataatt | 120 |
| ttataaaagt | tttaatttga tctataatat ttaaaaaaaa atattattta | tttaaatcat | 180 |
| tgatgtcacc | taaaatataa taaaacaata aagtaaataa tattttttt | attaaactac | 240 |
| gggttaaaat | aaaaaagagg gcgttacttg agacatccaa caattttgtt | ggggcaccag | 300 |
| caacattggt | gaaagggcta aaatgtcctt cattattttg ttataaaagg | ttaaagtgac | 360 |
| ttgtccatac | gagtcattat tcatttttct ctcgcaccgc tttcttcttc | ttttaccttg | 420 |
| gttcttcgtc | ttcctctctt ttccggcact cctttgtcat cttcgtcttt | tctccagtgc | 480 |
| tgcttgatct | tectetttee tecatatett etettgtget aetgeattgt | : tcgggtaatt | 540 |
| g | | | 541 |
| | | | |
| <210> | 4836 | | |
| <211> | 584 | | |
| <212> | DNA | | |
| <213> | Glycine max | | |
| <223> <400> | unsure at all n locations 4836 | | |
| tctcatggct | atgagaggct aaacccccat tgttgggagc ttggcatgc | aactcttggt | 60 |
| attcgtttag | g cctatttcat acatttctga tcttaatgca atttattat | tttatctttg | 120 |
| caaagaaatt | tgggagaaaa gaataaataa attaggctct tcatgcggg | a aatcaaatat | 180 |
| aaagtgtctt | agtagatgtg ggtggaaaca aagatttcat tagatagaa | a aaaaatcatt | 240 |
| aacattgcat | cacaagtagt tttggcatgc taggctccaa cataatcac | a ttctgaattc | 300 |
| atctttcggc | c atttaaatta ttgctcattt ttcttgttat ttcttcctt | t toottttato | 360 |
| cccaattttc | c acacttacaa ttccttatct cttctacttc ttctaattg | c ttaataattg | 420 |
| tgtttgcato | c actttaagta caatcaaagt ctctgtggaa tcgactctc | g aacttnegag | 480 |
| tcttttacta | a tttaaaacga attggtacac ttgccanaga gttaatata | t gtgtgatcaa | 540 |
| tcccttccgg | g nggcatcctt tatgtattct attttgaata cata | | 584 |

| <210> <211> <212> <213> | 4837 553 DNA Glycine max | \$ | | | | |
|-------------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| <223> <400> | unsure at a 4837 | all n locati | ions | | | |
| tcaagtccat | gcttgtctga | tttttccctt | acatttgcta | taaagcaacc | accttcaaat | 60 |
| tcatgagaca | gtttggcaaa | gaaagcagta | gcaagggcag | tcttgcctat | gccacctatg | 120 |
| cccaatattc | caagggttct | aacttcattt | gacccaattt | ttagtgatga | ttcaatctgt | 180 |
| tcataattgt | cctcaattcc | aaccagtcct | tccagtttgt | ttgggtatct | tggagtcagt | 240 |
| ttttgcaaaa | catccccaac | aatgttctta | aggaattcag | attcaatcgt | accatatgaa | 300 |
| aaggggaaaa | aatgaaataa | atgatgtatt | gtaagtctaa | caaattcaaa | agaaaaagaa | 360 |
| aatagaagta | cacaaatgat | tgattataca | taatctagaa | acaatatggt | attgtagtag | 420 |
| ataaaacaaa | gggaaaaaag | gactangaaa | ggaaaatcca | atgtcttaga | gcaaataatc | 480 |
| tatgtctctt | tttctactca | acgaaatgca | ttgcanacta | catgaaagtt | gtatactaca | 540 |
| aaaaaaaaa | aaa | | | | | 553 |
| <210> <211> <212> <213> <400> | 4838 520 DNA Glycine max | × | | | | |
| | ggtgacttaa | aatatatcta | aatatccaaa | atatctattc | atatgaatat | 60 |
| | taaatattct | | | | | 120 |
| - ' | | | | | cggctgaaga | 180 |
| | | | | | | 240 |
| | atgtcttgtc | | | | | 300 |
| | | | | | ttaggaggaaa | 360 |
| | tatcgccgag | | | | | 420 |
| | tgcaatcact | | | | | |
| | tggtcctttt | | | | gtatatattt | 480 |
| gctatatgaa | tgctctttat | gacttgatta | ttgttcatta | | | 520 |

| | 4839 565 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 4839 | |
| taggttaaat | tagtctaaac ttacgaggga tcgatgttta gtattttagg ctacaacata | 60 |
| gaacacaaaa | gcatgattga ttagagaaat atcttcatat gcatcagctt gtttgttaga | 120 |
| aagacccaat | gctttttacc tattattgtc aattttactt atttgcattt actgttttta | 180 |
| ccatacaagt | agtttatttt tgtttttaac catcgtttat caatgttatt ccaacaatgc | 240 |
| ctgatttcta | aataaaactc tgtctaataa gcaagttccc tgagttcgat actcggatca | 300 |
| ctccatttta | attttaaata cttgacaacc cggtgcgctt tccggcaaat cagatttccc | 360 |
| ttgaacatat | ttgcataaag gaaaatggac caaaaagtaa ctgcagggga aatccaacac | 420 |
| ctttctcaat | acatttgaag cacttgatgt tactagttat atcttgtgaa ctagcctttg | 480 |
| gagggatttc | ctctatgttt ntacccttat catcctttgg cttcgaaggt ggtactccta | 540 |
| acacacttgg | agcttgtcct ttttt | 565 |
| <210> <211> <212> <213> | 4840 320 DNA Glycine max | |
| <400> | 4840 | |
| tttcgtctta | cagaatgcaa aaagtttata cggataacca ctccggtgtt ttcgcccgtc | 60 |
| agcgtgactg | ataagtcagt atgacagatc ttgtgagcgc ggaagataac gtaaatctcc | 120 |
| acgtgtcaac | aggettgtet geegegattg acgaagggeg cagaagaega egttagtete | 180 |
| tgcgtgctat | caggetttte gteatacaga cageaaaaag tttataegga taaceaeteg | 240 |
| ggtatttacg | cccgtcagcg tgactcaaaa gtcagtatga cagatcttgt gagcgcggaa | 300 |
| catgacgtaa | atgtccacat | 320 |
| <210> <211> <212> <213> | 4841 591 DNA Glycine max | |

| <223> <400> | unsure at a 4841 | ll n locati | ons | | | |
|-------------------------|---------------------|-------------|------------|------------|------------|-----|
| ttgatcttnc | accaccgccg (| ccttcatcat | cttaaaatta | cattttaata | ttattactac | 60 |
| tttgattttc | aaccttgtat 1 | tttggctata | ttactatggt | atttgaacaa | tttagtattt | 120 |
| ccttattttc | atggtttggt | tgaacaagta | tgttatttga | ctatgtggat | tttataagtt | 180 |
| aatctattta | tgattgctac | ttcatgggtt | ttttttcttc | atgttgaggt | tactattttt | 240 |
| tatgaatgtt | gtacgaatgt | ttaagatata | tgtgcatact | ttaagtttga | tacgcacttt | 300 |
| ggctttttgt | tgatgccaaa | gggggagaga | aatagggatg | aatcaagaac | tcacatgagt | 360 |
| aaataattta | attttaaaat | aagcataaat | tcaaaaacaa | agggggagca | tttataagag | 420 |
| tgatcgacta | ggaaaaagtg | tgtgtgtgtt | tcttgatttc | agaagttgtc | atcatcaaaa | 480 |
| aggtggagat | tgtggaagca | aagcttcatg | atgaatcana | aatgattcaa | aggggtttga | 540 |
| tgatacaatg | atgacaacaa | aaatgatgac | aaggcgatga | acaaaagctc | a | 591 |
| | | | | | | |
| <210> <211> | 4842 496 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | • | | | | |
| <400> | 4842 | | | | | |
| tgccttccaa | gaatgatatt | gcggttatca | tgtacacaag | tggtagtaca | ggtctgccaa | 60 |
| aggtttgttt | cttcgtcaag | ttttgttaaa | ggtgtccctt | tctgtgtgtc | tgtgaatgta | 120 |
| taatctctta | ttcatatttg | tgatttgatg | caaagtgctt | ttgtccagag | tcatgcttgt | 180 |
| gaataatgat | tttgggtgat | aaaatatcaa | caagaaccat | atcaagacat | tgtattaata | 240 |
| taatgaaaat | tttcttgtct | gcaacattga | gaaccaatag | gatctccctc | agctcagttc | 300 |
| tatgattccc | tttgatttga | cagggtgtta | tgattactca | tggaaacatt | gtagcaacaa | 360 |
| cagcagcagt | tatgacaatt | attccaaatc | ttggtagcaa | ggatgtgtac | atggcctact | 420 |
| tgccccttgc | tcatgttttt | gaaatggcag | cacaggtaat | ttcttcttag | ccttctaact | 480 |
| gtcaaagtag | ttgatg | | | | | 496 |
| <210> <211> <212> | 4843 486 DNA | | | | | |

| <213> | Glycine max | | | | | |
|----------------|---------------|------------|------------|------------|------------|-----|
| <400> | 4843 | | | | | |
| ctaattaacc | taaaattgag ag | gaaaatgat | tttttaacac | acaaaccgga | agtactaaat | 60 |
| atttattacc | aaataaattg ga | aataatctc | atacaattta | cacaagtttt | atacataaaa | 120 |
| ggtagtgatt | ttcaccgact aa | acagaggcc | tctacaatca | cctttcctcc | ttctctatta | 180 |
| tactgccatt | gatcttcaag aa | agcaaatga | ctctattgat | gaacaacatc | caaagtctac | 240 |
| aagctccaca | tgaagctaca to | catgtggga | tcaagaacag | cttcatctac | gagaagctct | 300 |
| tttgcttcct | ctatcttttg ct | ttgggcaat | tcaatttaat | aacgtattct | taacaatttc | 360 |
| tccatgtatc | tgcttcattg co | cttgcggtt | tggttctgct | gaaagtttat | tccaataaac | 420 |
| acaccgattt | aatcctacat c | tacacttgt | tattggattt | ctatgggtca | aatttatcca | 480 |
| tatact | | | | | | 486 |
| | | | | | | |
| <210> <211> | 4844 627 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | |
| <223> <400> | unsure at al. | l n locati | ons | | | |
| agtgacctat | aaaacccagc t | tccgttaac | aaattattga | actggagaac | gataaatcaa | 60 |
| attccataag | tgaagaagac a | agggaatgt | aacttacata | gcttattaaa | gctactgagg | 120 |
| cattcagaaa | aaaagaaaga a | aaaaagcta | ctaggagcca | tatagtcgct | cctcgcaact | 180 |
| taaatcacgc | aggggtagat t | aaacaaggc | caaagcacaa | aaggaagaaa | ataaatcata | 240 |
| acataccaaa | aactaattat g | gtattaaat | gaatatgttt | tcatttcata | tatgttttga | 300 |
| ctataagttg | gcccaattca c | tatattttt | ccaaatccag | aaattcacaa | gaattataaa | 360 |
| accaatatat | atatatatat a | tatatatat | atatatattt | ctcgtttcaa | ccaaccaaca | 420 |
| aaactataat | gcaataggaa t | ttctactta | aaactcaata | tatcaaggat | taattaaaca | 480 |
| aacataaact | gacaatctca a | caaattaat | aagcatgtng | ccaggaacat | aaatgaaacc | 540 |
| ctatagaaat | gagggacccg g | aaaaagaaa | gagaatcttt | tgaggagcac | atgcaagcta | 600 |
| ctntaaactt | tacatctagg g | ttatac | | | | 627 |

| <210> <211> <212> <213> | 4845 437 DNA Glycine max | | | | | |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 4845 | | | | | |
| tctacttatg | tggcagggcg | ggcttccttc | actttcttgt | cttccacgcg | agctctgacc | 60 |
| actgctcttt | cttcccgcga | tgcttctttt | catgtacgcc | tgagtgggct | tatagcctaa | 120 |
| accatacttc | ccacgatttc | cttgggcatt | tatcaggcta | gttatgccgc | cgctgtcttt | 180 |
| gcctaaaccc | attccgggtt | cataaccgtt | ccccaacata | actcgggcca | tcattactgc | 240 |
| tgcatcagac | agacaaggct | gcccacagaa | ggagtccacg | gaggaaatgc | tgaccacctc | 300 |
| caaagactgg | aaagtggttt | ctaacgattc | ttttgcggct | tccacataaa | gcatagagga | 360 |
| tgggcagctt | accaagatgt | cttcctcgcc | tgacacgatg | accaagtgcc | cctccactac | 420 |
| gaatttcaac | ttttggt | | | | | 437 |
| <210> <211> <212> <213> <400> | 4846 615 DNA Glycine max | ¢ | | · | | |
| gaaagataga | acagccaaaa | agactgacaa | actgacatga | ataatgtact | attgttgtaa | 60 |
| gcttttcaag | gaatcaccgc | atcctgatga | aaagcagagg | caacaactca | gcaaccaact | 120 |
| tggccttgct | ccaaagcaag | ttaagttttg | gttccaaaat | cgtcgaaccc | aaatcaaggt | 180 |
| atctaaattt | atttacctaa | atattactca | agaatatatg | caaacttaat | ttatttaatt | 240 |
| agaaattatg | taagcattat | gcaatattat | tgccttttgc | aggcaataca | agagcgccat | 300 |
| gaaaattcat | tgttgaagac | agaattagac | agacttaggg | aggaaaataa | ggccatgaga | 360 |
| gagaccataa | acaaatcttg | ttgccccaat | tgtggcatgg | taacggctac | catagatgct | 420 |
| tccatgtcca | ctgaagaaaa | acaacttctt | attgaaaatg | ccaaactcaa | agccgaggta | 480 |
| ataaatttgt | ataaaactaa | atctaaatac | aaggaacatg | aaactttaaa | aaaagaaaat | 540 |
| gtattaatgo | tagaataatg | gtggatctat | gtgtcaaagt | acaaactaca | atcttaatga | 600 |
| aaagattccc | taata | | | | | 615 |

<210>

4849

| <210> <211> <212> <213> | 4847 684 DNA Glycine max | ς | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a 4847 | ıll n locati | ons. | | | |
| tatatcgttg | ctagcaagca | gtatatcatc | gacatataac | accaagaatg | agtatttact | 60 |
| cccactaaac | ttgtggtata | cacaatcatc | aactgcattt | gcctcaaaac | catatgaggt | 120 |
| aatgacttga | tggaacttgt | aataccattg | acgggaacct | tgcttcaaac | catagatgga | 180 |
| cttatttagt | ttgcaaacca | tagactttga | gtcacctgat | acaaagtttt | ctggttgcat | 240 |
| catataaatt | gtttcttcaa | tgtcaccatt | tagaaacata | gtcttaacat | ccatttgatg | 300 |
| tagctctaaa | tcataatgag | ctaccagtgt | cattattgtt | ctaaaagaat | cctttgaaga | 360 |
| tattggagaa | aaggtttctt | tatagtcaat | gccttccttt | tgggtaaatc | cttaggcgag | 420 |
| ccttatatct | ctcaacattg | ccctttgaat | cccttttgat | tntaaatatc | catttgtaac | 480 |
| caataggttt | cacactttta | ggcaattcga | cgagatccca | aacgtcattg | tcttgtatag | 540 |
| atttcatctc | atctttcatg | gcattgatcc | aattttgaga | gttagaacta | cgcatgactt | 600 |
| gtgataactg | ctaaataatt | gtgaataaat | gtagaaaatt | agccaaattt | ttgctttaaa | 660 |
| atattattta | gcagttattt | gtga | | | | 684 |
| <210> <211> <212> <213> | 4848 338 DNA Glycine max | x | | | | |
| <400> | 4848 | | | | | |
| gattgatggg | gaccccagtt | gatagaacga | gattaggcta | cttgggagta | cctgagctca | 60 |
| gttgaaagtg | ggctactggg | gaatgtggat | ttatgtgtga | ttcgtggatg | tggatagtcc | 120 |
| acttgcacca | ttgctcgatc | gcgagctatt | accacatgtg | accggtaccc | gataatccta | 180 |
| caagcttgaa | gtgaggaagt | ggggaatgga | gagacttcct | acttttattc | gttgaccaca | 240 |
| aagaggtacc | tggagatatg | atccgggggt | caggagacct | tggggacgtc | aggtgtggag | 300 |
| acttagatca | taaccatact | tgacccctgc | tcacccca | | | 338 |
| | | | | | | |

| <211> <212> <213> | 242 DNA Glycine max | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 4849 | | | | | |
| ccttcccgcg | aagcttcttt | tcatgtccgc | ctgagtgggc | ctataaccta | aaccatactt | 60 |
| cccacgaatt | cgttgggcaa | ttatcaggct | acaaatgccg | ccgccgtctt | tgcctaaacc | 120 |
| cattccgggt | tcataaccgc | tccccaacat | aactcgggcc | atcattaatg | ctgcatcgga | 180 |
| cagacaaggc | tgcccacaca | aggagtccac | ggaggaaagg | ctgaccacct | caaaagactg | 240 |
| ga | | | | | | 242 |
| <210> <211> <212> <213> | 4850 958 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| cgccccgcac | cgctgttatg | ttacgccccc | gtccagatac | cgaccaaaca | ctttcgccct | 60 |
| ctctncaccc | ccccccgcg | nnttgaatct | tggcntggag | acccttagaa | acccaagcct | 120 |
| ctacctatgt | cgcccggcgg | actgccacca | ctaaaatgac | tttcactcca | gcccttagca | 180 |
| caggtcttcg | ctccgacaag | ctgatttcca | tgtccacccg | cacgggctta | taacctacac | 240 |
| catacctccc | acgaattcga | cgggcaacta | tcaggctaaa | catacccgcg | ccgtatttgc | 300 |
| cgacacccat | accggggtca | tagaccgctc | cccaacaaaa | ctagggccat | aatcactgct | 360 |
| gcatcggaaa | cacaaagctg | cccacgacaa | cgaagtgccc | gcgagcgaaa | agcctgtccc | 420 |
| accctccaca | aggactgcgg | atcagtgtgt | ctcctaacac | aaatcatcag | ccggcattcc | 480 |
| aaagtgaggc | attagaggat | ggggcccggt | cccaagaaga | gctgctgccc | cacaagaaga | 540 |
| ccaagcgccc | ctcccctacg | aattccacac | ttctggagaa | gtgaacaaag | ggccaaaatt | 600 |
| cccattgacg | cagaagtcac | cgccgccccc | aacaaacgcc | ggtaaggggg | cgggccccat | 660 |
| ctcaaagcgt | cgaaaagcga | ctccgacagc | gagcgaacgg | accatacgaa | cacggcgaca | 720 |
| acaaaacccc | ccacctgggc | ccaacagacg | aagagccgtc | cacaagcccc | aaaccaacac | 780 |
| tcggaaaaac | gcgatcagtg | tggcaaccac | cgccaagcga | cgtccgtcca | caaaggacaa | 840 |
| aacacgccca | caaaccacac | cggcacgccc | ccaagcctct | gcacgccacg | acccaagcgg | 900 |

| caggcaaaac | tacatcacgc | gcgtcagggg | aaaggctcga | ttcgcccgcg | atcacccc | 958 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-------|
| <210> <211> <212> <213> | 4851 883 DNA Glycine max | ζ | ٠ | | | |
| <223> <400> | unsure at a | all n locati | ions | · | | |
| cccccgccc | ccccgtgctc | atcgcgcggc | atcttcctta | ccccgcttct | atctctactc | 60 |
| ctctctttcc | ngccccccc | ccttccttcc | ccgcncnccc | ccccntttga | cctgatcgct | 120 |
| gtttaggggg | actttaaact | caggtgggag | cttgggattc | ttttaaaagg | ggactttaaa | 180 |
| aatgttgaat | tttaaaaaat | ctcttaaaca | ggctctttga | aaaatgggaa | cttttggaaa | 240 |
| ggttttttct | aaaacaaccc | ccggtgaacg | attacccctt | aagggtgatt | cggtacccat | 300 |
| taaccaaagg | ggctttttct | tttggatttt | tgaaaataaa | acagttaaaa | gctctggtga | 360 |
| ttgattacaa | acattggggg | attcaataca | ccaatttaaa | atacttttaa | actggtttaa | 420 |
| cataaagtat | aattattgga | atttgaaaac | ttaaccgtct | taaacactgg | taattcattc | 480 |
| ctacttttgg | gtatcgatta | cacaaaagaa | aaactctttg | ggatgaatta | atggaaacct | . 540 |
| tcttggggtt | cctaatattt | tggaaaacat | tttttagact | tattctgatt | gagccttctc | 600 |
| ttgattctga | aacttgacct | gataattttg | aatcctgaat | ctggaaattt | ggattttggt | 660 |
| tgaccctgaa | tctttgggta | atcaaaaaac | ctggaagaaa | ttgttcccac | aagattattt | 720 |
| gaaaatggtg | aaaaaaaaa | aggcgctttt | tctttcgcgg | cttgacaccg | gaaaaaattc | 780 |
| ttgagaaatt | attcccaaaa | taatccagtt | ttaaaaaatt | gcctttaata | gggaagcccc | 840 |
| tctttaaatt | ccgataagaa | aaggacaaca | ccccatccaa | tgc | | 883 |
| <210> <211> <212> <213> | 4852 369 DNA Glycine max | × | | | ; | |
| <400> | 4852 | | | | | |
| tctattctga | atgtcaagcg | tctcgatata | ctacaggaca | ctatcaaata | tccgagtaaa | 60 |
| aagttattgt | cgcctgaatt | tgcttagagc | tttcgttttc | aattttgagc | ttctcgatat | 120 |

<210>

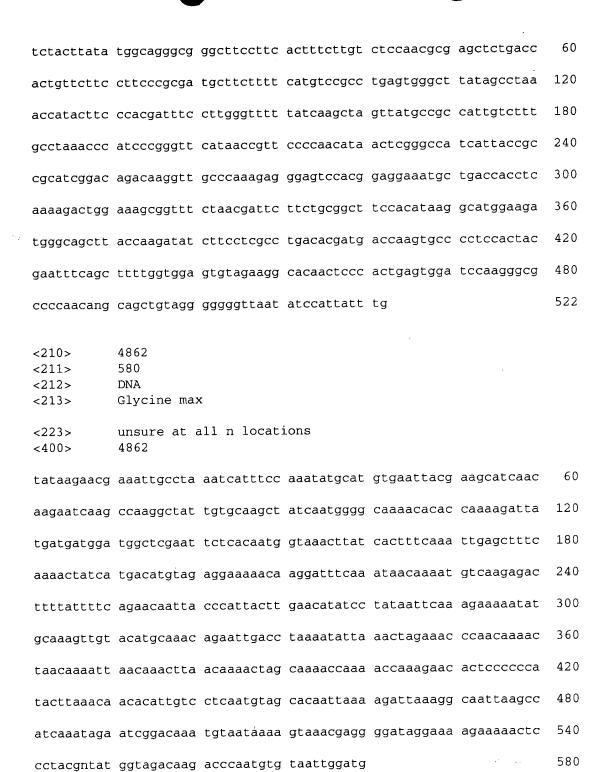
4855

| attacgagac | tcaatctgac | atccgagtta | aaagttatcg | tcgttagaaa | tttctcagag | 180 |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ctttcgttat | caattacgag | ttactcgata | tattatggga | ttcattcgga | cattcgagta | 240 |
| aaaaattatt | gccgtctgat | tttgctcaga | gattccgtta | tcaatttcga | ggatctcaat | 300 |
| atatcacagg | attcatttcg | acatctgagt | aaaagttatt | ggcctttgat | ttgctaacag | 360 |
| cttctattc | | | | | | 369 |
| <210> <211> <212> <213> <400> | 4853 394 DNA Glycine max | x | | | | |
| tgccacccag | ctcgcccagg | cgagctaggt | ttcttcctcc | agaaggcacc | gccttctagg | 60 |
| gaacttcctg | gaaagaccaa | gtgggcctga | ttgctatttg | cacccctgt | ttactaaata | 120 |
| cacccctgcc | cttttttgct | gattcttctt | ccgtaacgtt | atggaacttt | acgaatttcg | 180 |
| cgatgatact | cgttttcttt | ctgtaatgtc | acgaaacctt | acggattacg | caatcctccc | 240 |
| ttctttggct | tccggaatgt | tacggaactt | tacagattgc | gcattaacat | ttccttttga | 300 |
| cttccggcat | gtcacgaaac | ttcacggatt | gtgcaacaat | gctttcttta | gacttccggc | 360 |
| atgtcacgga | acttcacaaa | ttgcctaatg | atgg | | | 394 |
| <210> <211> <212> <213> <400> | 4854 333 DNA Glycine ma: | x | | | | |
| tgagatgagg | aagtgttgaa | gggtgaaact | tcctgctttt | attgttgacc | acaaagtggt | 60 |
| acctggagaa | tatgtcgcgg | gggtcaagaa | accttgggga | ccgtaagtgg | ggtgctattg | 120 |
| cccaaaacca | aacttgacca | atcccgaccc | aacccgggca | taatcggtca | gtgaaaacct | 180 |
| gtgatgtacc | taagcaggcg | agctcctggc | agtcaacaga | taaaaggaaa | acaagaccac | 240 |
| aaagcaagga | ggcttgtggt | ggctggccaa | ctgtgaattt | tgtgtaatat | gtggatggtg | 300 |
| gcctctggta | atcgattaca | aggcttaaaa | ttg | | | 333 |
| | | | | | | |

| <211> <212> <213> | 511 DNA Glycine max | : | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a 4855 | ıll n locati | ons | | | |
| ntatgcttgc | tctcttattc | acaccaaaaa | aaggagacca | aatctaccaa | agccaaaatc | 60 |
| tcctacaggt | ccaaactcaa | aaagacccat | tgatctgtga | tgattatgcg | cattacccct | 120 |
| tgatttgatg | ggaaatgact | tgcaaaatcg | atttatgacg | tgtttgtgat | ttggaattga | 180 |
| gaggagacac | ttgccagtgt | gagattttat | acacctttga | gtggttttcc | tccattttat | 240 |
| tgaatctagt | gtttcttcta | atgtttctgt | agaaaagaaa | tgcaaaatgt | cttaatctca | 300 |
| ttcttggtta | tgagaaattc | tatctttgtg | ctttcattcc | tcattcgtgg | cattattttt | 360 |
| gaaaaaaaaa | gtgtgttctg | atcggtttgg | gagtttgatt | tctttaccaa | gtgtgttcgc | 420 |
| attttaatgg | aagttttcac | aaactccaat | gccttctgtc | ttttacattt | caaagactgt | 480 |
| aatgtcttca | gtcttttaca | atttcaaaga | С | | | 511 |
| <210> <211> <212> <213> | 4856 586 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| tagaacaata | tacttgtcct | tcatttaatt | gtctttgggc | ttgacgacca | cgatcaacaa | 60 |
| agtactttcg | acacctactg | tatgttgatt | tcaccaacgc | tgttatcggt | atgttgcgac | 120 |
| aatccttcaa | aaccttattt | atacattcag | agaagttggt | tgtcatgtga | ccatattgac | 180 |
| gtccttctct | atcataagcc | atggtctatt | tttcctttga | aatgcgatca | atccatgttg | 240 |
| ctatcgctgg | actcagttgg | cgaaattttt | ctaaattttg | ataaaaaaaa | tatgcttgca | 300 |
| aggagtgtaa | cctgcatgaa | attagttagc | aacaacaatt | ttaagtatat | gtcaaactta | 360 |
| aattaaggtg | agcatgatca | acgaaatgtt | acccaatttc | ttcaacattt | ctttttgttt | 420 |
| ggcattattg | aatttgtgat | tgaaattgct | cgctatgtgt | cngacgcagt | aaacatgata | 480 |
| accgtgggga | gattgtcaac | caagcgcttc | attagccaca | acgaacttta | tactcgcgtg | 540 |
| acgatcagat | atgagacana | taccatnntt | atctatgaca | tgttca | | 586 |

| <210> <211> <212> <213> | 4857 531 DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 4857 | |
| tcctcaattt | ttttggattg atgctcttaa gacggttgcg tatatattaa accgagttcc | 60 |
| aaccaaaatt | gtctcaaaga caccttttga gctattcaag ggttggaaac caagtttgcg | 120 |
| acatatacgc | atttggggat gtctgtctga agtaagaatt tataatccac aagagaagaa | 180 |
| actagaccct | aagaatatta ctgggtattt cattggatat gctgaaaggt ctaaagggta | 240 |
| taggttctat | tgtccatccc acaacactan gattgtggaa tcaaggaatg caaagtttct | 300 |
| tgaaaatgac | : ttgatcagta ggagtgatca atttcagaac atttcttctg aaagggatca | 360 |
| ctatgaagct | taaccttcta ggacaagtaa taggttggta gtcattccca cccctcaagt | 420 |
| taaaatgggt | gttagacaac cagtgattga agttccacaa gctgttgaaa gtgatcatgt | 480 |
| agatcaagtt | gtttgtgagg aacaaaatga tgatattgaa acaactagtg a | 531 |
| <210> <211> <212> <213> | 4858 361 DNA Glycine max | |
| <223> <400> | unsure at all n locations 4858 | |
| tatagagctc | c tgtagtgggt tgtaaatgga ataacgattt aaacaaatga attaatatat | 60 |
| tcttggactt | gannagaaga ttannaaata gtaccatatt ttaatttaag atgcccgaaa | 120 |
| cttcgacaaa | a ataccgacaa caatttattt aacgaaaaaa ataagtattt ctattaaaaa | 180 |
| aacttgtttt | t attcaaatat tatattttat caaaaacaag aaatttggaa aagtaagtaa | 240 |
| ttgaatttct | t ttatccaagc ataaaattct aaaaatgaag caatttattt tattaatcca | 300 |
| agcacacaat | t tttgaaaatg aaataatttc atatgaagca tttaaaattc tatagaattt | 360 |
| t | | 361 |
| <210> <211> <212> | 4859 444 DNA | |

| <213> | Glycine max | |
|-------------------------------------|---|--------------------------|
| <400> | 4859 | |
| ggataatgtg | agtgtatgta tacatgattt tgatgatgtc aaa | aagaacaa tcagacgaag 60 |
| gtgcttcaaa | ggataagcat ggcttcaaga ttaatacaag act | tgattcaa caaacaaagc 120 |
| cttgcttcga | gattaactca aagatcaagc cttgccttaa aad | caaatagc tttcaagaca 180 |
| tgcaaggctc | tagtaatcga ttaccaggcg ttgtaatcga tta | accacgca gtgtaatcga 240 |
| ttactagcag | acagggttga aaaatagctg gtgaaaagag tt | ttacattt gaattttcaa 300 |
| catgtaatcg | attaccatat gtgtgtgatc gattaccagc aa | cgaaactc ttgaaattca 360 |
| gattccaaag | tcatgaccct tcaaattata actgtgtaat cc | attacacc aacattgtaa 420 |
| tcgattacta | gtggagagtt ttca | 444 |
| | 4860 538 DNA Glycine max | |
| <400> | 4860 | 60 |
| | gattctgtga tattcctctt gccccaaaaa ga | |
| aagatagtat | aaataagtat gtaaataaaa tcacaatcat aa | |
| gccttattcc | ttctcccctt ccttctatgg aagccctggt cc | tcgaaacc agctaattag 180 |
| atctcccccc | ctaacagtca atgtgtttga ttgcgagaag ga | catcaacg tgccagttac 240 |
| cgttgttttc | gtggttgaaa atcgagcccg aggagccaga gt | ggategtt teetteatet 300 |
| tgtcacagag | tgtgacgaca gatttagaca aatccgtgat gg | stggctgcg atcaaatcca 360 |
| actttgacga | gtgggtgtcc agtttcctgg tctgtgctgc ca | atggtggtc gcgtgagact 420 |
| gaagcgtgga | cttaatggcc tcaagctcta ctttcaaagc gt | taagtete tgagaageea 480 |
| tccttgtaca | cgtacacgat tgaggtgaaa ctcttaacga aa | agcaccaat gatacata 538 |
| <210> <211> <212> <213> <223> <400> | 4861 522 DNA Glycine max unsure at all n locations 4861 | |



<210> 4863 <211> 266 <212> DNA <213> Glycine max

| <400> | 4863 | | | | | |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| tgactgattg | ggtattcaac | accgaaacga | tcatgctggg | tatcgtcgaa | cgctaccctg | 60 |
| aacattctgg | tttgaccact | gcccacaatc | gtgcgatcgc | aaacgattat | actcaagtat | 120 |
| acacctttgc | tgaggctgcc | agtacgacgc | tggactattt | actgccagac | gcacccatgt | 180 |
| gtatctatcc | caatgacctt | acctttcacc | cgagtataca | cctatgccat | ttgctatcct | 240 |
| acgccaaggc | tatggggtgc | acatac | | | | 266 |
| <210> <211> <212> <213> <223> <400> | 4864 927 DNA Glycine max unsure at a | c all n locati | ions | | | |
| | | nattatatat | 2222111022 | taaaaatatg | tatataataa | 60 |
| | | | | | | 120 |
| | | | | ccggggattt | | |
| | | | | gttgttttat | | 180 |
| gggnataatt | nagatttttg | aatttaaagg | gagatntgga | aaatggtgat | tttttggggg | 240 |
| aaggttatat | taatgataag | gctggagagg | gggttataga | gctaaacaat | atttatggag | 300 |
| gaatttgttg | gggtgtgaaa | aaggtaatta | tgggggtatt | ggatttgtat | aaaaaaattt | 360 |
| tgggttaata | aaaggtgttt | aaaataaatt | ggggtattat | taatggggga | ttggaaagat | 420 |
| aagggtgtgt | aaagagggag | ttaaggagga | aatggtgagt | aaattaaaag | aatggaaagg | 480 |
| gggttttaaa | gattgttttg | ggggtttcaa | ataaagtatg | gaggatgggg | aaaatattaa | 540 |
| gatatgttat | ttggttgaaa | tgatgagaaa | atgggcgttt | agtaagaatt | agagattttg | 600 |
| gtggaaggaa | aaagggaaaa | gtttaatgaa | tgggataaag | ggggaactaa | aaaggagttg | 660 |
| ttaggggggt | gaatattaaa | tatttggaaa | ggaaatagaa | agggggaggg | gtatagggaa | 720 |
| tgagaggaaa | gaatttggac | taaaagataa | gggataggag | tggaagaata | aagaataatt | 780 |
| gaggtaggtg | ttaatgggaa | gaattgatag | gaaatatggt | aaagaggtgt | aaaggattaa | 840 |
| gtattaaagg | aaaaaatatg | tgtgatggag | tggtaaataa | tagaggtgta | atgttgaatt | 900 |
| | | | | | | |

gaangtgagt aagggtaata atgtgta

927

| <210> <211> <212> <213> | 4865 779 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a | all n locati | ons | | | |
| ctgcatgtct | agggtttact | cnacagagaa | ggcgtccgcg | tattcttaga | ctgccgacac | 60 |
| tatgtgctga | cgtgacataa | tattagcttc | cttcttggaa | agcgctcggt | gggctacact | 120 |
| tagcttaaaa | tggttacaac | agcgtatact | actctagacg | aatgtgtgtc | cttatatccc | 180 |
| tcttgttcga | ctaaactgtg | accaatcgaa | aaatagtgcg | tgcacactta | aaaacagaat | 240 |
| ttactcccca | tatecetgeg | tgaagaataa | gagaaaagat | ttgcttcatt | aaatttatag | 300 |
| acgcggggta | ctttccacca | aggctcagat | gcataacgat | ccttcccaca | tggtgattac | 360 |
| accgcgagcc | tatgatgttc | ttgcaatgac | agacgccttg | ctccccatca | taccctgccc | 420 |
| tttatacgtc | tcagtcctta | cgtccagcaa | ttctttagaa | gtccccaccc | agggtgttca | 480 |
| gccattcgtt | acataaaaaa | cccttcgtt | tatgagattc | ccaaaccctg | ccaatctcta | 540 |
| taaaagtggt | cacgtttgct | agctccaaag | cgattttgcc | gaaattcgcc | ctgtggggtg | 600 |
| ccctccaatg | ctgggggact | tttggtaaaa | gtctcttccc | ctttctcatg | gcaccatgcg | 660 |
| gggttttaga | gatttagacc | ccttctatgc | ggcgtggcac | ctccctaatc | tgtacgcctt | 720 |
| gagggagaaa | ctggcttccc | ttctcccttc | ccatacctgg | cgctacacac | ccagtgtct | 779 |
| <210> <211> <212> <213> | 4866 527 DNA Glycine max | × | | | | |
| <400> | 4866 | | | | | |
| | ctcgcccagg | | | | | 60 |
| | aaagaccaag | | | | | 120 |
| | ttttttgctg | | | | | 180 |
| gatgatacto | gttttctttc | tgtaatgtca | cgaaacctta | cggattacgc | aatcctccct | 240 |
| tctttggctt | ccggaatgtt | acggaacttt | acagattgcg | cattaacatt | tccttttgac | 300 |
| ttccggcatg | tcacgaaact | tcacggattg | tgcaacaatg | ctttcttttg | acttccggca | 360 |

| tgtcacggaa | cttcacgaat | tgcctaatga | tgggtgccaa | gtacctcgaa | gtggtcaaac | 420 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gagggtcgca | tcccaacaaa | cggatggttc | ccagacgaaa | ttagggtatg | acaattgcat | 480 |
| acaatagtta | tcacacagtc | tgtatcatta | agagcacgtt | ctccccg | | 527 |
| <210> <211> <212> <213> | 4867 528 DNA Glycine max | s. | | | | |
| <400> | 4867 | | | | | |
| ctagctcatt | tacaagtgca | gccattttcc | ccagactttg | aattgaaaaa | ttgacagatc | 60 |
| atagagcaac | caaagatttt | tgtttcgaat | tcgatataat | caagtagttt | agatcctatt | 120 |
| gttgtgccta | ggctttaagg | gttactttct | ttgttgggca | tactcttctt | taatgttcca | 180 |
| gtgaccatta | atatacaacc | tcttattgat | atgttccctt | tttcaccttt | gtccgtttca | 240 |
| tttctctgca | tatttatatt | cattgcaatt | atatcatttg | ccgcagatcc | gataatgagt | 300 |
| cctgtgaaag | cagcgatatt | gaggacctgg | atgttgactt | tgagcagcca | gtcaatcaaa | 360 |
| ccggggagga | aaaagatgag | gattggggat | tcctcttgga | tttgaggaga | atagtggaac | 420 |
| gggaagaaag | agagataaag | tcgcatcaag | aggagacaga | ggttgttaac | ttgggcactt | 480 |
| gtgaagaaaa | aaatgaggtc | aagattggca | cttgtgtgtc | cgctaaca | | 528 |
| <210> <211> <212> <213> | 4868 597 DNA Glycine max | k | | | | |
| <400> | 4868 | | | | | |
| tcatgatgat | gaatcaagtt | gattcaagta | tttttgataa | tgacaaagtt | gatgacaaaa | 60 |
| atcccaaaga | atgatttcaa | gattaagtca | acaagaagaa | atcaagaaga | ttcaagaatc | 120 |
| aagtgaagtt | tgatttcaag | attcaagaaa | agatgaattc | aagattcaag | agaagaaatc | 180 |
| aagaagactt | cacaagggaa | gtattgaaaa | gttttttcaa | aaaacaaaca | tagcacaatt | 240 |
| ttgtttttc | aaaagagttt | tctcaaaatt | ttctaagtta | ccagagtttt | tactctctgg | 300 |
| taatcgatta | ccagtttctt | gtaatcgatt | accaatggca | aagtttgatt | tcaaaaagct | 360 |
| ttcaactgaa | tttgcaacgt | tccaattgat | ttcaaaatgg | tgtaatcaat | tacaagatat | 420 |

| tggtaatcga | ttaccagtgt | atctgaacat | tgaaattcaa | aatcaattgt | gaagagtcat | 480 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| atcctttcat | aaaaagcttt | gtgtaatcga | ttgcatggtt | ttgggtatcg | attaccagtg | 540 |
| acaagtttga | ataaaaatca | aaggatataa | ctctttccat | gggttttagt | tttttt | 597 |
| <210> <211> <212> <213> | 4869 590 DNA Glycine max | · · | | | | |
| <400> | 4869 | | | | | |
| tcataaggct | atctatgggc | taaggcaggc | acttagagct | tggcatgatg | ctctcaaatc | 60 |
| atttataaca | tcatatggtt | tcacaaccag | aagaagcaac | ccttctctct | ttatctacat | 120 |
| ctcgggtaac | ataactgtct | attttttggt | gtatgttgat | gacctccttc | tcacaggaaa | 180 |
| taacactaca | ttcatagaca | cattcattga | gttcttatct | aatcggttgt | cactcaaaaa | 240 |
| catgggggca | ccatactact | ttatgggtat | tgaacttata | cccatgaact | caagcatgtt | 300 |
| cctctcacaa | cacaaataca | tcaaggatgt | acttgagaaa | tttgagatgc | aggatgtgaa | 360 |
| gtcgtcaccc | acaccacttg | cctcgacgac | tacactcatg | ttgcatgatg | gtacaccaac | 420 |
| caataatgct | actcaatatc | aaagaattat | tggtgcatta | caatacctta | ccctaacaag | 480 |
| acctggcctc | tcattctcca | tcaacaaact | ctcaatatta | tgcacaaacc | aaccttcctt | 540 |
| catcttccac | atctcaggcg | ccttctcgaa | tacttgaagc | cactattaac | | 590 |
| <210> <211> <212> <213> | 4870 524 DNA Glycine max | ς. | · | | | |
| <400> | 4870 | | | | | |
| tcatcctcag | atccctcttg | atggactatg | ctaaatttag | acagccctcc | taggtttaga | 60 |
| ctaacttaaa | ctaagcttca | tcctcaaatc | cctcttgttg | gactagactt | agcttaaata | 120 |
| gcttactaaa | gtttagacta | atttagccta | agctttgtcc | tcagatccct | cttgttagac | 180 |
| tagacttaga | ccaaacaaca | ttattgtaac | agcatactta | aaaccaaaat | ttaatccgca | 240 |
| gatccctcct | gtaagaataa | gtttcaattc | tgcttcattc | aatttctaag | gcaacaatac | 300 |
| | | | | | | |

atttcccaat gctaaagtca cctaactatg ctcacaaatg ggtgattaaa ccaagagcat 360

| acgaaattta | agcaatgaaa | gaagcattga | acacaagaaa | cacaatcaat | tagatattaa | 420 |
|---------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| agtaattaca | tcagctattc | tttagaaatc | cccaacaagg | gtgtttagcc | agccattaca | 480 |
| gaagaaaccc | taacaataat | gagattacaa | aacctagcta | tctc | | 524 |
| <210><211><212><212><213> | 4871 436 DNA Glycine max | ς | | | | |
| <400> | 4871 | | | | | |
| tctggtggga | catcttgact | tgctttccaa | tctgacattc | accacagatt | ctgccttctt | 60 |
| ctattttgaa | actgggaatg | cctctaacaa | cacctttgtc | aatgatattc | ttcatgcctc | 120 |
| ttaagtgcag | atgtgcaaat | ctttgatgcc | atattttgac | ttcatcttct | ttggaggatg | 180 |
| gacatgtgga | ggagtaactg | ggttcttgag | gcgtccataa | gtagcagttg | tcctttgatc | 240 |
| tgctgccctt | cattagaacg | tcattcttct | catttgccac | caaacattct | gactatgtga | 300 |
| agcttacatt | gaatccttca | tgacacaact | gactgatgct | gatcaaattt | gcagtcagtc | 360 |
| ccttcaccag | cagaactttg | tttagactag | gaactacatc | ctggactagc | tctaccattg | 420 |
| caggatcttt | ccttta | | | | | 436 |
| <210> <211> <212> <213> | 4872 400 DNA Glycine man | x | | | | |
| <400> | 4872 | | | | | |
| tcgacgaata | tggcacgacg | gtccctcttg | actctgatgt | ctgctacacg | aactctgaac | 60 |
| actgagactc | cttaccgcga | tgccccaatc | tatgagcgcc | tgaatgcgat | tataacctaa | 120 |
| aacatacatg | ccacaatgag | cttgggtata | tatcaagata | cttatgccgc | cattgcctat | 180 |
| gtctaaaccc | atcccggcga | cataaccgat | ccacaacata | gctcgagcga | tcattatccg | 240 |
| acgcatcaga | cacacaaagt | tgcccacaga | aggagtccac | ggatgaaatg | ctgaccacct | 300 |
| caaaagactg | aaaagcggtt | gataaccatt | ctattgcgag | acccacataa | tgcatggacg | 360 |
| atgggctgat | caccaagata | tgatactcgc | ctgacactat | | | 400 |

4873

<210>

| <211> <212> <213> | 514 DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 4873 | |
| tcattctaca | . cctgaaaaag aggatgagat agttgcacaa aaaaaaaagc ttcttaacaa | 60 |
| aaattttcat | gcaggtggac cttcttctag taattccgac ttacagcagc ctcgtatccc | 120 |
| tcttccattc | ccacctagag cgattccaaa caaaaaaaat ggaagaagtg gaaaaggaga | 180 |
| tcttggagac | cttcagaaaa gtagaagtga acatacctct gctagatgcc atcaagaaga | 240 |
| ttccaagata | tgccaagttt ctaaaggagt tatgcaccca caaaaagaag ctcaagggca | 300 |
| atgaaaggat | tagcatgggt agaaatgtgt cagcattgat aggtaaatct gttcctcaca | 360 |
| ttcctgagaa | atataaggac ctangtactt tctgtatacc ttgcatcatt gggaacatta | 420 |
| aatttgagaa | tgccatgcta gatctangag catcagttag tgtcatgcct ctgtccattt | 480 |
| tcaattcttt | atctcttgga tccttgcaat ctac | 514 |
| <210> <211> <212> <213> | 4874 437 DNA Glycine max | |
| <400> | 4874 | |
| tttcagcgtg | g atttgtcttt ttgtgagggg attttgtgca aggctcactt tgagtgcaca | 60 |
| tatcccaagg | g aagattaaac cactcatgct tcaatttatc acactactct taaaaagttt | 120 |
| tatatgattt | accaatttta gtcaaagtcg aatattcatt tttggcgaaa ctctatgtta | 180 |
| tcctttttaa | a gtgaaatgtc agaagtgaag cgtaccacat tcggtagtga tgtacacatt | 240 |
| tttccatggc | taagtaaggg taattcatga atctaaattg aatgattaag ataagcctac | 300 |
| acaataatco | aatggaccat gctctaagct tcttttgtcc atttaattaa actccacaag | 360 |
| tccccaaagc | tatgggtcat tettteetet etteatgage tgageeagag gaaaagagae | 420 |
| accattttcc | e acttttc | 437 |
| <210> <211> <212> <213> | 4875 504 DNA Glycine max | |

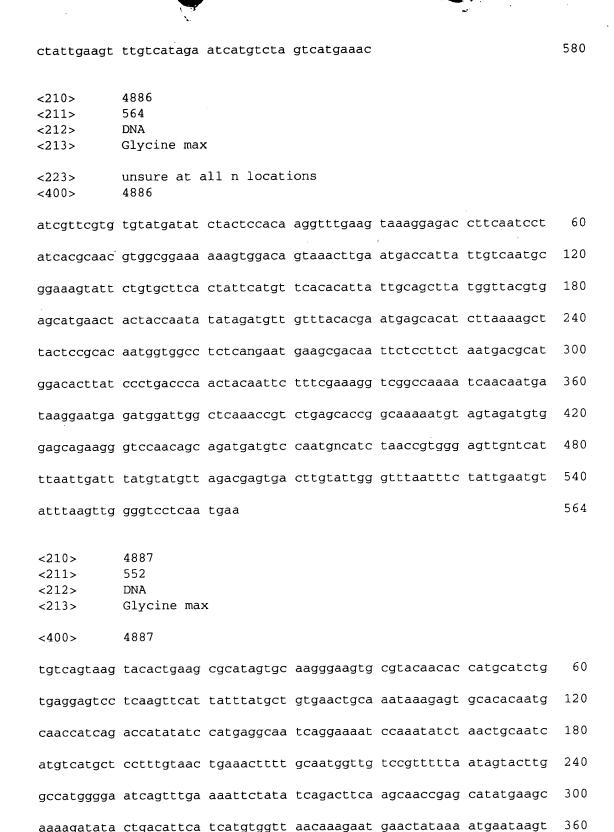
| <400> | 4875 | | | | | |
|---------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tcatgatgaa | tcaagattga | ttcaaagagt | tttgatgata | acaaagatga | tgacaaaaag | 60 |
| ctcaaaagtc | aagaacactt | catgataaca | aagatgatga | tctcaagaat | caaagaatga | 120 |
| gttcaagatt | gaatcaagta | cacttcaggg | atcaagagga | aagttgaatt | caagaatcaa | 180 |
| gaatcaagtt | tcaagattca | tgttccaaga | atcaagatca | agattcaaga | ctcaagattc | 240 |
| aagaatcaag | agaagactca | atcaagataa | gtattaaaaa | acaatttcaa | aaattgagta | 300 |
| gcacatgatt | ttttctcaaa | accttttatt | agagagtgtt | tactctccgg | taatcgatta | 360 |
| ctagattatt | gtaatcggtt | accagtagca | aaatggtttt | caaaaaactt | tcaaactgaa | 420 |
| tgtacaacgt | tccaataaat | ttcaaaatgc | tgtaatcgat | tacaagtatt | tggtaatcga | 480 |
| ttaccagtgt | gtctgaacgt | tgaa | | | | 504 |
| <211> <212> <213> | 4876 405 DNA Glycine max | κ | | | | |
| <400> | 4876 | | | | | |
| tttgttggga | atctctgccg | agtcttgatg | taaatattat | ttactatcta | tttaatgttg | 60 |
| ctttgatgtg | ttcattgctt | ctatctgaat | ttaattctaa | catgtttttg | gttcgatcac | 120 |
| ccatttgtgt | gtaaagttag | gatttttaac | attgaaaaat | attttgaatc | cttataactg | 180 |
| gatataacat | ggctagataa | ctgtattatc | aagacacaga | gtgcagggac | tctactttta | 240 |
| ttatgttgtg | accttaatgt | tgttccgcta | ggccaaattc | gatgagggat | ccgagaacga | 300 |
| aatttagtta | gaattagccc | attcatgcga | gacatcagtg | tttgggacaa | ttgttctcac | 360 |
| cattgaacac | cgaagccaca | tttgatagag | aaaaactttt | tattg | | 405 |
| <210><211><211><212><213> | 4877 326 DNA Glycine max | x | | | | |
| <400> | 4877 | | | | | |
| aatacctcag | cttcttgaca | tatttgggaa | attgatttta | tatacaaaag | gggcttgctt | 60 |
| cagaatatto | cattttttt | actttaacaa | grottcatat | cattgaggtt | atcggattaa | 120 |

| gatgtattcc | aaaagaagaa | caacgagcat | tttactggga | ccttaccctt | gatttattat | 180 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| aaggggaaaa | gagggttaaa | ataagaataa | aaaggaaaaa | gaccccttcc | taaatacagc | 240 |
| tttggtgcac | caaaattgtc | ctggcttcac | attgacataa | gcccgttaaa | caaggatatc | 300 |
| ctatttcatt | gggtgctgaa | tccttc | | | | 326 |
| <210> <211> <212> <213> | 4878 562 DNA Glycine max | ς. | | • | | |
| <400> | 4878 | | | | | |
| tgaagctcaa | gaaaagcttg | aagaagtttt | ggcttttaca | tgcccaactt | ccttgagtcg | 60 |
| catttgtatt | ggttgttatc | ttggttggtg | catcttagta | catttgatat | ttgtgttgca | 120 |
| tcatgcatca | tcatggttag | tgtgaagaaa | agtttctaag | ttagaaaaat | ttctttagag | 180 |
| gcaaaaactg | ttttaatcga | ttacagagtt | gtcgtaatca | gttacaacaa | gttgtttgaa | 240 |
| ccttaaagag | ctaagtctcg | tatcggttta | attgattata | gtagtatttt | aatcgattac | 300 |
| actgttgttt | gagataatga | ttgatttatt | caggagtctc | tgctttgatc | gattaccaag | 360 |
| tggatgaatt | gattacttct | ttcttgttca | agtgttcaaa | agtgaacaag | aacactctaa | 420 |
| tcgattactt | aggacatcta | atcaattaca | ttgttcttga | gttgctttcc | aaatgttgga | 480 |
| tgaacacttt | aattgattac | ttagataatc | taatccatta | ctttgttaaa | ataatcaact | 540 |
| atcttataga | tttaattgat | ta | | | | 562 |
| <210><211><212><213> | 4879 621 DNA Glycine max | ×, | | | | |
| <400> | 4879 | | | | | |
| aaatggattt | taaaccccca | aaattgtaat | actaaatatt | tattacctat | acttaataga | 60 |
| aaatacttat | aacactacaa | aataaccatt | aattggaaga | agttgataca | atttacacaa | 120 |
| gttttataca | caaaagttag | tcgtattcac | cgactaacac | cttttacata | acaaaaatat | 180 |
| gtttatgctt | tataattttt | ttataaaaaa | attgcgatta | attgcataaa | taagtttttt | 240 |
| atctatagga | attaaacaca | atgccaaagg | atttataata | ctcacatcct | gctcaacaaa | 300 |

| aatatgtttt | tgatttataa | ttttttacaa | aaaaaaaatt | gttattaatt | acataaatat | 360 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gttgctttat | ttacaattga | tgatataagc | tacccttttt | aatccttctt | gaattaatta | 420 |
| tgatacacga | cacaaactat | cttaataatg | actcattact | tttttaatag | taatagaata | 480 |
| aaatggtcga | taattattt | tatttaaatt | tgtattatta | atgacactta | gtacccttta | 540 |
| tttataatca | attaattgac | gtacaaaatt | aagtaactat | gatacaatta | gttgtattca | 600 |
| ataaaaaaat | tactcttttt | a | | | | 621 |
| <210> <211> <212> <213> | 4880 430 DNA Glycine max | ς. | | | | |
| <400> | 4880 | | | | | |
| gtaccactat | ttctttaaca | ttttgggttt | ggttctcccc | ttgaaagcat | tctagtgtgc | 60 |
| tctgcttgag | cacttgaaag | tgggcccttc | tcaactccac | cccaataata | gggtcatggt | 120 |
| gaaagccttt | gagattgtgt | gccctttctt | taaactttga | accaatgtgc | ctgtgtaccc | 180 |
| gcacttttt | catatgatat | cgacggttac | attcagtggg | gtctacttga | acagcatgtt | 240 |
| caaaaagctt | ttctagttat | acacgaatgt | atcacactac | tttaaagatt | gtcgcttaga | 300 |
| ggacctacct | actgaccttg | atgttgatgg | attaccacta | atgttcaagc | acatgaggag | 360 |
| ctctgcttcc | cattctatag | gaaatgtaac | cccaactggt | ttcaggttat | taatgaggat | 420 |
| ctatagaacc | | | | | | 430 |
| <210> <211> <212> <213> | 4881 655 DNA Glycine ma: | × | | | | |
| <400> | 4881 | | | , | | |
| tcacaagcaa | gtttccatca | agtggtaatc | agagcacaag | agcttcaagt | aggtgctcct | 60 |
| taaagctcca | ttgttgtttc | ttcatttttc | tccatgtatt | tcctcacatg | tattgtggta | 120 |
| aatgttgtta | acatgattct | ttagaattta | caccgattaa | acttgctata | taagctagat | 180 |
| ttgattttct | atggttcaaa | tttcttgttc | ttattcttga | accatgaatt | atgttaagtt | 240 |
| taggttcctt | tgagttttgt | attgctattt | ttttgtggct | gaaacctaaa | ctataaaatt | 300 |

| attaaaaaaa | cattaaagta | gaagaaaacc | tcaaaaatct | agagtgacat | gttcacctat | 360 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tgtaattttg | tcatagaagt | tatgtctaga | catgaaactt | gtcacataag | tgtgctgaat | 420 |
| tttattttt | tgtttctttg | tctaactcat | ttgttcataa | gtgtatgaaa | ttcttttagc | 480 |
| ctcttagttg | atttgagtca | actcttgcat | gttaattagt | ccttaacatg | ttcatgcaaa | 540 |
| attcttagag | agtctttgat | tgtgaacctt | ttttttgaac | ttttaggttt | ccttatgatt | 600 |
| gtgtttattg | cgaatttgag | tttttgtgat | taaaattgct | ggctgaaatt | ttgat | 655 |
| <210> <211> <212> <213> | 4882 347 DNA Glycine max | . | | | | |
| | | gaatcagaca | tctgtgggaa | gagttatgac | catttgtatt | 60 |
| | | | | tactattttc | | 120 |
| tatccttgta | ataacttatg | accaatcgaa | tttctcgaga | gcttgtgttg | ttaaatttca | 180 |
| agcgtgtcga | tatattatgt | cctataatca | gacatccgag | tgaaataata | tgactagtcg | 240 |
| attttctcga | gagcttgctt | tgtccaattt | cgagcgtctc | gatatattat | gttccaaatt | 300 |
| cggacatgcg | tgtgaaaaga | tatgaccatt | ctaatttatc | gaggagc | | 347 |
| <210> <211> <212> <213> | 4883 412 DNA Glycine max | × | | | | |
| <400> | 4883 | | | | | |
| | | | | | cttcgggggc | 60 |
| | | | | | gaagttcttg | 120 |
| | | | | | ggtgtaaaga | 180 |
| | | | | | catccgcgaa | 240 |
| | | | | | tgatagctag | 300 |
| | | | | | cctgaacaag | 360 |
| caatcaattc | ctcttttaga | accatgccta | tgtgctcgcg | acaggcccct | tt | 412 |
| | | | | | | |

| | 4884 581 DNA Glycine max | | | | | |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|------|
| <400> | 4884 | | | | · | |
| ttgagactaa | gatgaagaat | ttcacaaaaa | ttatttaaac | ctatgcacaa | caaacccaca | 60 |
| acagttttag | aaaaatcgtc | attgaccaat | gagtctcaat | gacgattttt | caaaaattgt | 120 |
| catagactag | ctaatgttaa | tgagtcccaa | cgacactttt | tccaaaactg | tcgtagtttc | 180 |
| actaatctta | acaatgattc | ttccaaaaat | tatcgttaac | aacttcactt | aattacaaaa | 240 |
| atgtcaccac | tttttttaa | agacaatttt | tataaccatc | atagatttgc | cgtcctggaa | 300 |
| tgcatgtttt | ttaataatga | attggaaatt | aagcgataat | atattcattg | gtgaatatca | 360 |
| ttaacaatga | caaaagcaac | tcactagcgg | tcaataatac | tagaggataa | attatatgta | 420 |
| tatgagatag | acaaaataat | agaatttaca | tataatattc | cgtaatattg | tccttattta | 480 |
| taggagcaaa | cactatcttt | acttgaagac | tatgtgatat | ctcaacattg | atccagagtt | 540 |
| ttatatgaac | aatataccac | ttataaggat | gaataaaaag | t | | 581 |
| <210> <211> <212> <213> <400> | 4885 580 DNA Glycine max | ς. | | | | |
| cccatcttgg | tggtgaagct | ccttcttcca | tggcttattc | cctagtggat | ggcgcctcct | 60 |
| ctcacctctt | ttcctttgtc | ttccgctaca | tctccatggg | gtaaaatcac | cattgaagga | 120 |
| | | | | acaagcaagc | | 180 |
| tggtaatcag | agcacaagag | cttcaagtag | gtactcctta | aacctccatt | aattttttgc | 240 |
| tttaccttct | cttccattgt | tgtttcttca | tttttctcca | tgtatctcct | cacatgtctt | -300 |
| gtgataaatg | ttgttaacat | gattctttag | attttccacc | gattaaactt | gctatagaag | 360 |
| ctagatttta | ttgtctatgg | ttcaaatttc | ttgttcttgt | tcttgaacca | tgaattgtgt | 420 |
| tgagtttagg | ttcctttgag | ttttgtcttg | gtatttttg | tggctgaaac | ctaaaccata | 480 |
| aaattcttac | aaaatattaa | agtagaagaa | aacctcaaaa | atctagagtg | acttgttcac | 540 |



gatttgaact catggtgtac agcaagaaac aaacaaaaat aacaaggata ttttattttc 420

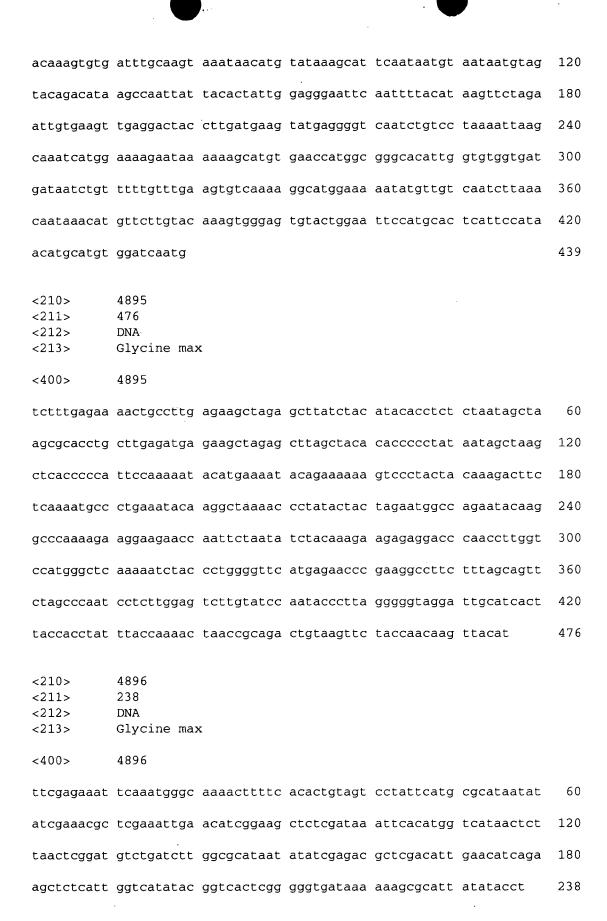
<210>

4890

| aaatatgtag | ctgtcagatt | gacctcacaa | atttttcatg | caaattatta | aatagcttat | 480 |
|---|---|--|---|--|---|---------------------------------|
| agttatataa | gtatgatgtg | aataaaaact | aaaacaaagg | aaatggaaat | tatacaaagg | 540 |
| cctaaaaatt | ta | | | | | 552 |
| <210><211><212><213> | 4888 301 DNA Glycine max | ς | | | | |
| <400> | 4888 | | | | | |
| atggcttagt | ccctaacgcg | aggcgcctcc | acacacctct | tctgcatagt | ctaacgctac | 60 |
| atccccatgg | agtaaaatca | ccattgaaag | acctcatcga | agctcaaaga | tccagccacc | 120 |
| atataaaccc | cacaaacaag | ctaacatcaa | gtggtaatca | gagcacaaaa | gcttctaata | 180 |
| cgtactccct | aaacctccac | taattttatg | ctttaccttc | tcttccaatg | acgaaacttc | 240 |
| atttttctcc | atggatctac | tcacatgtct | tgcgaaaaac | gactgtaaca | cgataattta | 300 |
| t | | | | | | 301 |
| | | | | | | |
| <210> <211> <212> <213> | 4889 535 DNA Glycine max | ς. | | | | ₩. |
| <211> <212> | 535 DNA | < | | | | ъ. |
| <211> <212> <213> <400> | 535 DNA Glycine max 4889 | | ctcctgtcag | tggtacctta | agtttcatgg | ÷.· |
| <211> <212> <213> <400> taataaatct | 535 DNA Glycine max 4889 atatatggtt | taaaacaagc | | tggtacctta taatgcatat | | |
| <211> <212> <213> <400> taataaatct gataatttct | 535 DNA Glycine max 4889 atatatggtt tcatttgatt | taaaacaagc ttgatgaaaa | ccccatggat | | accacaaggt | 60 |
| <211> <212> <213> <400> taataaatct gataatttct aagtgggagt | 535 DNA Glycine max 4889 atatatggtt tcatttgatt aaaatatgtt | taaaacaagc ttgatgaaaa ttcttgtttt | ccccatggat | taatgcatat | accacaaggt ttgacaccaa | 60 120 |
| <211> <212> <213> <400> taataaatct gataatttct aagtgggagt tgatcgaggt | 535 DNA Glycine max 4889 atatatggtt tcatttgatt aaaatatgtt ttgctacatg | taaaacaagc ttgatgaaaa ttcttgtttt aagtgaaaca | ccccatggat atatgttgat atttcaatct | taatgcatat gatattttac | accacaaggt ttgacaccaa acatgaaaga | 60 120 180 |
| <211> <212> <213> <400> taataaatct gataatttct aagtgggagt tgatcgaggt tatggatgat | 535 DNA Glycine max 4889 atatatggtt tcatttgatt aaaatatgtt ttgctacatg gcatcttatg | taaaacaagc ttgatgaaaa ttcttgtttt aagtgaaaca tcatcgacat | ccccatggat atatgttgat atttcaatct taagattaat | taatgcatat gatattttac aagaattttg | accacaaggt ttgacaccaa acatgaaaga ctcgaggtat | 120 180 240 |
| <211> <212> <213> <400> taataaatct gataatttct aagtgggagt tgatcgaggt tatggatgat ttttgggtcta | 535 DNA Glycine max 4889 atatatggtt tcatttgatt aaaatatgtt ttgctacatg gcatcttatg tcacaggaaa | taaaacaagc ttgatgaaaa ttcttgtttt aagtgaaaca tcatcgacat cctatattaa | ccccatggat atatgttgat atttcaatct taagattaat caaaactcta | taatgcatat gatattttac aagaattttg agagataaac | accacaaggt ttgacaccaa acatgaaaga ctcgaggtat ggatgaaaga | 120 180 240 300 |
| <211> <212> <213> <400> taataaatct gataatttct aagtgggagt tgatcgaggt tatggatgat ttttgggtcta tttggtcta | 535 DNA Glycine max 4889 atatatggtt tcatttgatt aaaatatgtt ttgctacatg gcatcttatg tcacaggaaa agggttgctc | taaaacaagc ttgatgaaaa ttcttgtttt aagtgaaaca tcatcgacat cctatattaa ccattgtgaa | ccccatggat atatgttgat atttcaatct taagattaat caaaactcta gggtgatagg | taatgcatat gatattttac aagaattttg agagataaac gagagatttc | accacaaggt ttgacaccaa acatgaaaga ctcgaggtat ggatgaaaga accagtgccc | 120 180 240 300 360 |

| <211> <212> <213> | 463 DNA Glycine max | • | | | | |
|---|---|--|--|--|---|---|
| <223> <400> | unsure at a | ıll n locati | ions | | | |
| tgtataagcg | agtgcaagaa | tgcaggatag | ttttgaaacc | agtgtctgtg | acacgacaaa | 60 |
| agccaccaag | gcatatgctc | tccatgtttg | cacacttgtc | agccattaga | agtaatccca | 120 |
| gatcattcac | tcttcggaag | taagtaattt | ggaactcttg | gcttcgaacc | aatgaaagat | 180 |
| gtttcaatct | cccaagttga | ttaatttgtt | gaagaccagc | attggttagg | tcaaatgtaa | 240 |
| ttcttggttc | aatcagtggt | gcatcttgaa | gatccaaatg | ggtcaaaagc | atgagacctt | 300 |
| tggatattgt | accaaccata | gcatcagtta | tatagtctac | attaagacac | agtttctgaa | 360 |
| tgcttggaag | tatggatggt | tgagcangat | ttgagggcag | ctgggatccc | aaatttgggc | 420 |
| taagcagttc | agtcactgtc | actgaagaaa | tgtagccaat | ctc | | 463 |
| <210> <211> <212> | 4891 598 DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <213> <223> <400> | | call n locat: | ions | | | |
| <223> <400> | unsure at a | all n locat: | | ctctcacgag | gtggaggttg | 60 |
| <223> <400> ttcataagtg | unsure at a | all n locat: | ccttagagtc | | | 60 120 |
| <223> <400> ttcataagtg agccatgttc | unsure at a 4891 aaatcaagtg | all n locat: caaccatctc aattagtaat | ccttagagtc tgaatattca | gaatcaccaa | caacagaata | |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc | unsure at a 4891 aaatcaagtg tcagtatgaa | caaccatctc aattagtaat cacaatgcat | ccttagagtc tgaatattca agaatgatca | gaatcaccaa ggatgcacac | caacagaata | 120 |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc taatctatga | unsure at a 4891 aaatcaagtg tcagtatgaa tcaaaatgct | caaccatctc aattagtaat cacaatgcat ctatttcagg | ccttagagtc tgaatattca agaatgatca atcaaagggt | gaatcaccaa ggatgcacac tgtaaatcac | caacagaata tatgcctaac ctggattgcc | 120 180 |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc taatctatga cctagtcatg | unsure at a 4891 aaatcaagtg tcagtatgaa tcaaaatgct aaggttctat | caaccatctc aattagtaat cacaatgcat ctatttcagg agcaaataat | ccttagagtc tgaatattca agaatgatca atcaaagggt gtgttctcaa | gaatcaccaa ggatgcacac tgtaaatcac acaagcacct | caacagaata tatgcctaac ctggattgcc aacaaggggg | 120 180 240 |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc taatctatga cctagtcatg taaaactaca | unsure at a 4891 aaatcaagtg tcagtatgaa tcaaaatgct aaggttctat caccatatgc | caaccatctc aattagtaat cacaatgcat ctatttcagg agcaaataat aaagatatcc | ccttagagtc tgaatattca agaatgatca atcaaagggt gtgttctcaa aagtaagttg | gaatcaccaa ggatgcacac tgtaaatcac acaagcacct aaattttgtg | caacagaata tatgcctaac ctggattgcc aacaaggggg agcaacaccc | 120 180 240 300 |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc taatctatga cctagtcatg taaaactaca taaaataatg | unsure at a 4891 aaatcaagtg tcagtatgaa tcaaaatgct aaggttctat caccatatgc actatagtca | caaccatctc aattagtaat cacaatgcat ctatttcagg agcaaataat aaagatatcc acaaaaaatt | ccttagagtc tgaatattca agaatgatca atcaaagggt gtgttctcaa aagtaagttg tcaaacaaaa | gaatcaccaa ggatgcacac tgtaaatcac acaagcacct aaattttgtg attaaaagta | caacagaata tatgcctaac ctggattgcc aacaaggggg agcaacaccc aaactatgaa | 120 180 240 300 360 |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc taatctatga cctagtcatg taaaactaca taaaataatg aactacctaa | unsure at a 4891 aaatcaagtg tcagtatgaa tcaaaatgct aaggttctat caccatatgc actatagtca aaaagatagc | caaccatctc aattagtaat cacaatgcat ctatttcagg agcaaataat aaagatatcc acaaaaaatt gaaaaataag | ccttagagtc tgaatattca agaatgatca atcaaagggt gtgttctcaa aagtaagttg tcaaacaaaa acaataatac | gaatcaccaa ggatgcacac tgtaaatcac acaagcacct aaattttgtg attaaaagta ttaaaaaata | caacagaata tatgcctaac ctggattgcc aacaaggggg agcaacaccc aaactatgaa aaaaaagaac | 120 180 240 300 360 420 |
| <223> <400> ttcataagtg agccatgttc ctcacaatgc taatctatga cctagtcatg taaaactaca taaaactaca taaaataatg aactacctaa ttagtaaatg | unsure at a 4891 aaatcaagtg tcagtatgaa tcaaaatgct aaggttctat caccatatgc actatagtca aaaagatagc gcaaagttta | caaccatctc aattagtaat cacaatgcat ctatttcagg agcaaataat aaagatatcc acaaaaaatt gaaaaataag cgagtttggg | ccttagagtc tgaatattca agaatgatca atcaaagggt gtgttctcaa aagtaagttg tcaaacaaaa acaataatac agaccccaac | gaatcaccaa ggatgcacac tgtaaatcac acaagcacct aaattttgtg attaaaaagta ttaaaaaata cagctaaagc | caacagaata tatgcctaac ctggattgcc aacaaggggg agcaacaccc aaactatgaa aaaaaagaac gggttgcccc | 120 180 240 300 360 420 480 |

| <211> <212> | 543 DNA | | | | |
|--|--|----------------------------------|------------|------------|-------------------|
| <213> | Glycine max | | | | |
| <223> <400> | unsure at all n loc 4892 | cations | | • | |
| taggctaaac | tttcataagc tatttaag | gct aagtctagtc | caacaagaat | gatttgagga | 60 |
| tgaagcttag | tttaagttag tctaaaco | cta ggagggctgt | ctatattgag | cctagtccaa | 120 |
| caatagggat | ctgaggaaga agcttgg | att gattcattcc | aattggggat | cgaggtttag | 180 |
| taatttaggc | tacaacatag aacacaaa | aag catgattgat | tagagaaaca | tccttatatg | 240 |
| catcagctgg | tctgctagaa agacccaa | aca cttctaccta | ttgctatcaa | ttttacttac | 300 |
| ttacattttt | actgttttta tcctagad | cat agtttaattc | tactttaaac | catcaattat | 360 |
| caatgtttct | ttcaacaatg ccttatt | ct gaatttaacc | cagtcttaga | ctagtttcat | 420 |
| tgagttcgat | actcagattc atccatt | ta atttttaaat | acttgacgat | ccggtgcgct | 480 |
| ttctggaaaa | tcgggttttc cttgaata | ata nttgtacgaa | gaaaaagtgg | aacaaaaagt | 540 |
| | | | | | 543 |
| aac | | | | | |
| <210> <211> <212> <213> | 4893 251 DNA Glycine max | | | | |
| <210> <211> <212> | 251 DNA | | | | |
| <210> <211> <212> <213> <400> | 251 DNA Glycine max | gaa cctaaggctg | gcaactccta | aattccccta | 60 |
| <210> <211> <212> <213> <400> aaccgaattc | 251 DNA Glycine max 4893 | | | | |
| <210> <211> <212> <213> <400> aaccgaattc | 251 DNA Glycine max 4893 aaaaatgcca aaatgat | aaa atggacacta | aactttaatg | accattattg | |
| <210> <211> <212> <213> <400> aaccgaattc atattgcttt tcaatgcgga | 251 DNA Glycine max 4893 aaaaatgcca aaatgat tgaaatgggg gggggga | aaa atggacacta cta ttcatgttca | aactttaatg | accattattg | 120 |
| <210> <211> <212> <213> <400> aaccgaattc atattgcttt tcaatgcgga | 251 DNA Glycine max 4893 aaaaatgcca aaatgat tgaaatgggg gggggga aagtattctg tgcttta ctgaactact accaata | aaa atggacacta cta ttcatgttca | aactttaatg | accattattg | 120 180 |
| <210> <211> <212> <213> <400> aaccgaattc atattgcttt tcaatgcgga ttacgtgagc | 251 DNA Glycine max 4893 aaaaatgcca aaatgat tgaaatgggg gggggga aagtattctg tgcttta ctgaactact accaata | aaa atggacacta cta ttcatgttca | aactttaatg | accattattg | 120 180 240 |
| <210> <211> <211> <212> <213> <400> aaccgaattc atattgcttt tcaatgcgga ttacgtgagc aaaagcttac <210> <211> <212> | 251 DNA Glycine max 4893 aaaaatgcca aaatgat tgaaatgggg gggggga aagtattctg tgcttta ctgaactact accaata t 4894 439 DNA | aaa atggacacta cta ttcatgttca | aactttaatg | accattattg | 120 180 240 |



| <210> <211> <212> <213> | 4897 511 DNA Glycine max | ς | | | | |
|--|--|--|---|---|---|---------------------------------|
| <400> | 4897 | | | | | |
| tgtaggatta | tggggtaccc | atcgcatgtg | gtactatgtg | gcggtcgggc | gatggtgcac | 60 |
| aacaaatttt | ccacatccca | taaatcgcgc | ataaacccac | catcccctgt | tgcccacctc | 120 |
| caactgagct | cacgtactcc | cacgtagccc | atatcctcgt | ttctctcaac | atcgggtccc | 180 |
| catcaatcct | cccaagcttc | cccaacatcc | aagtaattca | acattcaaac | agcacaaact | 240 |
| atcacagcca | agaaaacagg | gcaaaggcag | aaaactctgc | ccaaaacacc | aacaaaaatc | 300 |
| acagcttttt | ctcacttaaa | gaccccagta | acatttcctt | tgttccaatt | cgttaaccgt | 360 |
| tggatcgact | cgaaactttt | actggaagtc | tctagtacat | aaaatctaca | ttttgaccgt | 420 |
| tgggatctac | taacaaacat | ccagaactca | ttctgaatta | ctctttccac | aaccagcaaa | 480 |
| tacatagaat | ttttctgcac | ttatgcaaaa | t | | | 511 |
| | | | | | | |
| <210> <211> <212> <213> | 4898 505 DNA Glycine max | × | | | | |
| <211> <212> | 505 DNA | × | | | | |
| <211> <212> <213> <400> | 505 DNA Glycine max | | acgagtgcct | agatgaagtt | tctgtggact | 60 |
| <211> <212> <213> <400> tgttatgtat | 505 DNA Glycine max 4898 | aaaggtctct | | | | 60 120 |
| <211> <212> <213> <400> tgttatgtat catctggtta | 505 DNA Glycine max 4898 ttcgtgctgg | aaaggtctct attgaaaggt | gtatggaggt | tctatttact | ctattgccag | |
| <211> <212> <213> <400> tgttatgtat catctggtta tggttcaatc | 505 DNA Glycine max 4898 ttcgtgctgg catatcccat | aaaggtctct attgaaaggt gtatcatctg | gtatggaggt cggatgtaag | tctatttact | ctattgccag | 120 |
| <211> <212> <213> <400> tgttatgtat catctggtta tggttcaatc aagctgtaag | 505 DNA Glycine max 4898 ttcgtgctgg catatcccat ttctggaagt | aaaggtctct attgaaaggt gtatcatctg aaggctccgc | gtatggaggt cggatgtaag agatttggct | tctatttact ttctgtagag attggatttt | ctattgccag gaatggtctg cttaaggtat | 120 180 |
| <211> <212> <213> <400> tgttatgtat catctggtta tggttcaatc aagctgtaag ggtatgcata | 505 DNA Glycine max 4898 ttcgtgctgg catatcccat ttctggaagt atgcttacgg | aaaggtctct attgaaaggt gtatcatctg aaggctccgc tacatgatat | gtatggaggt cggatgtaag agatttggct attttactgt | tctatttact ttctgtagag attggatttt atctcttctt | ctattgccag gaatggtctg cttaaggtat catcatcatc | 120 180 240 |
| <211> <212> <213> <400> tgttatgtat catctggtta tggttcaatc aagctgtaag ggtatgcata aataacaaca | 505 DNA Glycine max 4898 ttcgtgctgg catatcccat ttctggaagt atgcttacgg cacattacac | aaaggtctct attgaaaggt gtatcatctg aaggctccgc tacatgatat tcatctttta | gtatggaggt cggatgtaag agatttggct attttactgt ctatacgtga | tctatttact ttctgtagag attggatttt atctcttctt tcatttctgt | ctattgccag gaatggtctg cttaaggtat catcatcatc tgtttggtac | 120 180 240 300 |
| <211> <212> <213> <400> tgttatgtat catctggtta tggttcaatc aagctgtaag ggtatgcata aataacaaca cttcattatg | 505 DNA Glycine max 4898 ttcgtgctgg catatcccat ttctggaagt atgcttacgg cacattacac acaacaacaa | aaaggtctct attgaaaggt gtatcatctg aaggctccgc tacatgatat tcatctttta gttgtttact | gtatggaggt cggatgtaag agatttggct attttactgt ctatacgtga ttaagctaat | tctatttact ttctgtagag attggatttt atctcttctt tcatttctgt cctccttggc | ctattgccag gaatggtctg cttaaggtat catcatcatc tgtttggtac gttgattcaa | 120 180 240 300 360 |

| <210> <211> <212> <213> | 4899 335 DNA Glycine max | | |
|-------------------------|--|-------------|-----|
| <223> <400> | unsure at all n locations 4899 | | |
| tgccgcccag | ctcgcccagg cgagctccgc tcgtcccggc gagctaaggt tg | cttcctcc | 60 |
| anaaacaata | accttctgga agaatcttct tggaggccca agagggcctg gt | tgctattt 1 | 20 |
| gcacccccat | ttttgctaag tacacccccc tgcctttttt tggtgatact tt | tttcgtaa 1 | 80 |
| agctacgaaa | acttacgaat ttcgcaacga tacttgaatt ctttccgtaa ag | ttaccgaa 2 | 40 |
| acttggggat | tacataatta teeeettttt gaettacagg ategtacaga ac | ctcactaa 3 | 00 |
| ttgggcaacg | acgcttccgt ttaatataca ccgtg | 3 | 35 |
| <210> <211> <212> <213> | 4900 541 DNA Glycine max | | |
| <400> | 4900 | | |
| tcttgaacgt | gatcaatata ttcattggta cagaataaag gatgaagacg tg | gttcatga | 60 |
| tagacaacac | c ctagaaaata aaccggtaca gacttccact gctcgatttt gt | ttgggtga 1 | .20 |
| caccgactgg | g gatgacatte tetaceggtt ttgcatatgt ggagggtgaa ca | cgttaata 1 | .80 |
| atttggtttg | g ggctttacaa cgcttctgag gcctttttt aaagcgtgat gc | ectectg 2 | 40 |
| gagttatttc | c cactaacaga gaccaaacat tgatgaatgc agtgaagact gt | attecetg 3 | 00 |
| tctgtacaaa | a tttgttgtgc agctttcaca taaacaagaa tgtgaaggcc aa | acgtaaat 3 | 60 |
| cattaatttc | gcaaaaaaat gcttgggatt atgtcatgga ttgttgggga tg | stetgaetg 4 | 120 |
| attgtccttc | c aaaacaacag tttgatgaat gcctgaagaa gtcaaaatgg ct | tgcgcacc 4 | 180 |
| ttggccaatg | g ttggtgacta tggtaagaaa catggatata tcacacaaga aa | attttttt 5 | 540 |
| t | | . 5 | 41 |
| <210> <211> <212> <213> | 4901 621 DNA Glycine max | | |

| <223> <400> | unsure at all n locat | cions | | | |
|-------------------------------|---|--------------|------------|------------|-----|
| tgcctcgaag | aggtccagga aggacaaggo | agccgaagga | actaattccg | ctccggagta | 60 |
| tgatagtcac | cgctttaaga gtgctgtaca | ccaacagcgc | ttcgaggcca | tcaaaggatg | 120 |
| gtcgtttctc | cgggagcgac gcgtccagct | cagggacgac | gagtatactg | atttccagga | 180 |
| ggaaataggg | cgccggcggt gggcatcact | ggttactccc | atggccaagt | ttgatccaga | 240 |
| aatagtcctt | gagttttatg ccaatgcttg | gccaacagag | gagggcgtgc | gtgacatgag | 300 |
| atcctgggta | aggggtcagt ggatcccgtt | tgatgccgac | gctatcggcc | aactcctang | 360 |
| atatccgttg | gtgttggaag agggccccga | a atgtgagtat | ggccagaaga | agaacccgtc | 420 |
| tgaccggttc | catgaggaag ccatcgccc | c acttctatgt | ttaccgagac | aagattttcc | 480 |
| cggactgctg | cagggaggcg agtgcaaato | attcccacca | acataaccac | cctgacccaa | 540 |
| tattgatgac | cttgcttctt agctaactc | tgcccaccaa | tcataatttc | caccttcccc | 600 |
| tgccgaattg | ccacattttt t | | | | 621 |
| <210> <211> <212> <213> <400> | 4902 333 DNA Glycine max 4902 | | | | |
| cttttgagct | cattccttta cttgcacata | a agaaagcaag | tgtccttaag | tgcccaaact | 60 |
| cttctaacat | ctgctccaat tcctcctga | a aaagagatgt | atttcacacc | gtcatttttc | 120 |
| atgcaacccc | caggtaatta ccattatgt | c atgcaaccaa | aattttcttt | aaagagcacc | 180 |
| atggatttaa | aaaagggaat ttttttcat | t ttcctgtata | tgcttgtgct | tgacattcaa | 240 |
| agaaagttac | gttttggttt ttcatgttt | a ttttgctgct | gaagctattc | tttttctcag | 300 |
| aacttcaaat | attatcattt cacgaaaaa | g aaa | | | 333 |
| <210> <211> <212> <213> | 4903 503 DNA Glycine max 4903 | | | | |
| ttactatgca | aggaataacc aaggaaaat | t ccttcatttg | acttagcatc | aaactttcct | 60 |

| aagttttctt | ttccattgtt | taatacaaaa | catttgcaac | caaaaacatg | aagatgcgag | 120 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| atgtttggtt | tcctgccatt | gaacagttca | tatggagttt | tctttaaaat | gggtcttatt | 180 |
| aaatccctat | tcatgatata | gcatgcagta | ttaacggctt | cagtccaaaa | atattttgga | 240 |
| agaagagtgt | catttaataa | ggttctaaca | atttcttcca | aagacctatt | tctcctttca | 300 |
| acaactccat | tttgttgagg | agttctacgt | gcagaaaagt | tatgttcaat | gccatgctta | 360 |
| ccacaaaata | attcaaattc | tttttttcaa | attcaccccc | ataatcactc | ctaatagata | 420 |
| taattttgag | atttttattg | tcttgaatga | tttatgctag | tttcctaaat | acttgaaatg | 480 |
| catcattctt | atgagtgata | aat | | | | 503 |
| <210> <211> <212> <213> | 4904 169 DNA Glycine max | × | | | | |
| <400> | 4904 | | | | | |
| tatccgtgac | gaaattgaat | ttctttttct | taattgtcta | gggtctactc | acatgctcca | 60 |
| tttggggttc | tgtggggtcc | tataaaccat | gcgccagaac | gataagtcta | atgaacacca | 120 |
| atgccaaaaa | taggccattg | ttgtttatta | atctcaaaca | tttgtctat | | 169 |
| <210> <211> <212> <213> | 4905 511 DNA Glycine max | x | | | | |
| <400> | 4905 | | | | | |
| tgagggaaaa | cttgatgcct | tggtcaacct | aataactcag | cttggcatga | atcataaatt | 60 |
| tgcacctgtt | acaagagtct | gtggtatatg | ttcttctgca | gatcaccata | cagatctttg | 120 |
| tgcttctttg | cagtgatctg | gagtcaatga | acaacctgaa | gcttatgctg | cctacattta | 180 |
| taatagaccc | cctcacagca | aaaccaacat | tagcgaacta | attatgatct | tccaagctac | 240 |
| agatacaatc | cacgttggag | aaatcattca | aatatgagat | gggcaagtgc | ttcacaacaa | 300 |
| caacagtctg | tccctccttt | ccagaatgtt | gctggtccaa | gcaaaccata | tgttcctcct | 360 |
| ccaatacagc | agcaacaacg | acaacagtca | caacgaagac | gacaagcaac | tgagacttct | 420 |
| cattagactt | ccttacaaca | attaataaaa | catatoacca | tccagaatat | gcaatttcag | 480 |

| catgagacaa | gagccttcat | tcagagtctg | a | | | 511 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 4906 570 DNA Glycine max | · × | | | | |
| <400> | 4906 | | | | | |
| tcagctgcag | caattaccct | gccagaaata | aggtttcccc | cactattctg | tgtattattc | 60 |
| tccaaagaaa | ggtctttcca | gaagccggat | gaataatttc | tagctaggat | gcgccaaata | 120 |
| tgcacagctt | ttgagctcat | tcctttactt | gcacataaga | aggcaagtgt | ccttaggtgc | 180 |
| ccagactctt | ctaacatctg | ctccaattcc | tcctgaaaaa | gagatgtatt | tcacacggtc | 240 |
| atttttcagg | caacccccag | gtaattacca | ttatgtcatg | caaccaaagt | tttctttaag | 300 |
| gagcagcatg | gatttaaaaa | agggaatttt | tttcattttc | ctgtatatgc | ttgtgcttga | 360 |
| cattcaaaga | aggttaggtt | ttgggttttc | atgtttattt | tgctgctgag | gctattctct | 420 |
| ttctgcagag | cttcaatatg | atcatatcag | gaaaaggaaa | aaagtatttc | tcaaatctac | 480 |
| atagaaataa | tgggtataat | tcaattcacg | acatatttat | tttacagtat | taattatgaa | 540 |
| aaatgtattg | aaattacttc | attcaataac | | | | 570 |
| <210> <211> <212> <213> | 4907 546 DNA Glycine ma: | × | | | | |
| <400> | 4907 | | | | | |
| ttttcctctt | gacttcatct | ccttatttca | tttttttaaa | acaaatttag | ccaaaataac | 60 |
| cactacagac | acattaccaa | aaagctggca | gcaaaatcaa | tgacgaaaaa | agaagctgag | 120 |
| acacagtgcc | agttgctgct | tatcaatccc | aaatttttt | caatttaact | tataaaataa | 180 |
| ttattataaa | aattaataga | tttttttata | tatgataatt | tttttattaa | ataacaataa | 240 |
| caatataatt | ggtataaata | ttattcattt | attaaatttt | agttggagag | aataaaagta | 300 |
| tcataagttt | gtaagtcatt | cacattcatt | ataaaaatat | atataaatat | aaaaaataat | 360 |
| ataatttact | aataaatcca | aagatttcct | tttaatccaa | acccaaagac | taaatgtata | 420 |
| taaatttata | tgcaaactca | ttcaaaagat | tgatttttgt | taaagttttt | atcattaata | 480 |

| atcataaaaa | aatttagcat | aacttataaa | taattttaca | attaaaataa | ttttaaaaaa | 540 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tatata | | | | | | 546 |
| <210><211><212><213> | 4908 358 DNA Glycine max | ζ | | | | |
| <400> | 4908 | | | | | |
| tgcctgtccg | atgcagtagt | aatgatggcc | cgagttatgt | tggggaacgg | ttacgaaccc | 60 |
| ggaatgggtt | tagggaaaga | caacggcggc | atgactaacc | tgataaatgc | caaaggaaat | 120 |
| cgtgggaagt | atggtttagg | ctataaaccc | actcaggcgg | atataaagag | aagcatcgtg | 180 |
| ggaagaaaga | gcggtggtca | aagctcgcgg | ttgaggcaag | aaagtgaagg | aagcccgccc | 240 |
| tgccacataa | gtagaagctt | tataagcgcg | ggtctgggag | acgaaggtca | aatggtcgcg | 300 |
| atataccaaa | atgatgttcc | gagtacattg | gatttggtac | gaccatgccc | tcctgatt | 358 |
| <210> <211> <212> <213> | 4909 343 DNA Glycine ma: | × | | | - | |
| <400> | 4909 | | | | | |
| tgtcacagtt | ctgccatcat | tggtggtgac | ttgaaaagag | gggattgtcc | attgaggtat | 60 |
| gagtttttat | gatttactgg | tgtgtttata | aattactgca | ttttgttgtt | tttatgattt | 120 |
| ttcacttcct | actacttttg | ggtttgatgt | tgtgataact | atcttaagga | ttacattaca | 180 |
| gctaagagtg | gatttgattg | ctgatcaaac | acaaaaggta | tttgatagga | tcctaacaaa | 240 |
| gttaggttgt | actgtcccac | cagttcctag | attttgcatg | caaaaaggag | gtaagaagct | 300 |
| gcattttta | taccatgcac | tttcatacct | tacgtgtgta | tgg | | 343 |
| <210> <211> <212> <213> | 4910 792 DNA Glycine ma | | • | | | |
| <223> <400> | unsure at 4910 | all n locat | ions | | | |

| tggctgaccc | aatgaaccct | ggacaccgcg | gnnaattnag | aggcgcgtta | ttgttccgcc | 60 |
|---|--|--|--|--|---|--------------------------------|
| ccaattgaag | ttctccagga | gtaatttggc | actattcaac | ccccaaaggg | ctctctgggg | 120 |
| ccttttgaac | catttgtaaa | ttagtatgcc | ccaaatttac | cccctggtg | aaacctatta | 180 |
| cccatttgaa | catttgtaag | cattccgtgc | ttaagtgcca | aaatctcttt | atatgtggtc | 240 |
| ccttatttga | gcttccagag | agaattttta | accgtttttt | ttcgcaaacc | ctccgtagtt | 300 |
| caccattttg | gcatgccacc | aaaattttcc | ttcaagagca | gcatggattt | gaaaagagga | 360 |
| aaatctttta | atttcctgaa | aggcttgtgc | gtgaaattca | agaacgctaa | gttttggttt | 420 |
| ccacgtttat | tttgccgcgg | aaggttttat | gtctctgcag | agctttcaaa | agatcctatc | 480 |
| aagaaaaagc | aaaagccttt | tctcaaattc | tcataaaaat | aatgggtgta | atttaattta | 540 |
| cgacatattt | attttccgga | gtaattttag | aaatgtattg | gaatacctta | attccataac | 600 |
| ccaatacatc | actggttgaa | atatttggca | gtcactgttc | atttggttaa | agactttctc | 660 |
| ttatcagaat | aaacattccg | tattttgctt | ggacaaataa | tctccacttc | agctacaagg | 720 |
| | ttatcatqtt | agcactatct | tgaaagcgtt | taaaccgacc | atctaatcga | 780 |
| adcctataca | | . 3 | | | | |
| taatttcact | | | | | | 792 |
| | | | | | | 792 |
| <210> <211> <212> <213> <400> | cg 4911 433 DNA Glycine max 4911 | x | | gtaactaact | | 792 |
| <210> <211> <212> <213> <400> tgcacaaaaa | cg 4911 433 DNA Glycine max 4911 gtaactaaat | x atttttttt | acaaaatgaa | | aactaaattc | |
| taatttcact <210> <211> <212> <213> <400> tgcacaaaaa cactaataat | cg 4911 433 DNA Glycine max 4911 gtaactaaat atagagtgaa | x atttttttt tactctaaag | acaaaatgaa gaagggatag | gtaactaact | aactaaattc agcccatcta | 60 |
| taatttcact <210> <211> <212> <213> <400> tgcacaaaaa cactaataat atcttcctaa | cg 4911 433 DNA Glycine max 4911 gtaactaaat atagagtgaa ttaaactaat | x atttttttt tactctaaag tacacaaaac | acaaaatgaa gaagggatag aaagcccaaa | gtaactaact gccttgatta | aactaaattc agcccatcta aattattcaa | 60 |
| <pre>taatttcact <210> <211> <212> <213> <400> tgcacaaaaa cactaataat atcttcctaa . gtgactgaat</pre> | cg 4911 433 DNA Glycine max 4911 gtaactaaat atagagtgaa ttaaactaat tggccaagct | x atttttttt tactctaaag tacacaaaac taatttgacc | acaaaatgaa gaagggatag aaagcccaaa ctggaaattg | gtaactaact gccttgatta ctcacaaccc | aactaaattc agcccatcta aattattcaa caaagcttat | 60 120 180 |
| taatttcact <210> <211> <212> <213> <400> tgcacaaaaa cactaataat atcttcctaa gtgactgaat ttgtaaaaaa | cg 4911 433 DNA Glycine max 4911 gtaactaaat atagagtgaa ttaaactaat tggccaagct attgaatata | x atttttttt tactctaaag tacacaaaac taatttgacc tttttgttag | acaaaatgaa gaagggatag aaagcccaaa ctggaaattg acttccaagg | gtaactaact gccttgatta ctcacaaccc ctgaattggc | aactaaattc agcccatcta aattattcaa caaagcttat tgctccattt | 60 120 180 240 |
| taatttcact <210> <211> <212> <213> <400> tgcacaaaaa cactaataat atcttcctaa gtgactgaat ttgtaaaaaa ggagatctgt | cg 4911 433 DNA Glycine max 4911 gtaactaaat atagagtgaa ttaaactaat tggccaagct attgaatata agtatcctct | x atttttttt tactctaaag tacacaaaac taatttgacc tttttgttag agaccctgca | acaaaatgaa gaagggatag aaagcccaaa ctggaaattg acttccaagg ctacgcagat | gtaactaact gccttgatta ctcacaaccc ctgaattggc acaactcaca | aactaaattc agcccatcta aattattcaa caaagcttat tgctccattt agaacaaaat | 60 120 180 240 300 |

<210> 4912

| <211> <212> <213> | 435 DNA Glycine max | |
|-------------------------------|--|-----|
| <400> | 4912 | |
| agctttttcg | gagccatctc ctgcaagaga taaatattca cgaagtcagt ttacccagaa | 60 |
| ttttcatctt | ataaccaaga ccaaacaaca ggggggtacc actttttctg aaatgcaaat | 120 |
| gtcaatgtga | atttgggcaa acccccatac attcaaagca ttagctacct aaatcacaca | 180 |
| cacacattta | taaagtattt tggctacctt aagatcacat acatgcattc cacagtatgt | 240 |
| cggctacttt | gaaagattgc atatcttgaa aggcacttaa actaaattaa caacgtattt | 300 |
| ttgtcacccg | tgttaataca ataaaaaagt atattggctt gctaccacgc aatatataca | 360 |
| cctatgatgc | cttcttgcta cctaacaagc aattcatatt taatcgaaag aaatattttg | 420 |
| ctacccacac | gattg | 435 |
| <210> <211> <212> <213> <400> | 4913 350 DNA Glycine max | |
| | tcaacaatga ttcaaaagtg ttttgatgat atcaatgatg acaacaaaaa | 60 |
| | aaggtgatga acaaaaagca caaaagatca gagaacaact caaatgaatc | 120 |
| | tcaagtgaat caagaacaag tcaagagttc aagaatcaag gagaattcaa | 180 |
| gactcaagaa | gaaagcctag aatcaagaat caagaatcaa gaatcaagaa tcaagactca | 240 |
| agatctcaag | aatcaagatc aagaatcaag aatgaaggaa agactcaatc aagataagta | 300 |
| ttaaaaaagt | tttttccaaa ctttgaatag cacgtgagtt tttgaccaaa | 350 |
| <210> <211> <212> <213> | 4914 364 DNA Glycine max | |
| <223> <400> | unsure at all n locations 4914 | |
| agcttcggca | ctgttaaggg taaagactct tcccgtggcc ttcagatgtc cagtntggtc | 60 |
| attcaggccc | ctaccattct gctccttctt gggatatgga caatctctct gaatattgtt | 120 |

| ggatcaagtg | gcctcagaat | aattaagaag | ggggggttga | attaattatt | cctaaacctt | 180 |
|----------------|-------------|--------------|--------------|--------------|------------|-----|
| tactaattaa | aaatttactc | ttctaaggat | tttactatgt | tgttaaataa | atgaagaata | 240 |
| gaaaagaaac | ttaaccaaaa | gtaaaagcgg | aaattaaagt | gcacagcgga | aattaaaaga | 300 |
| gtagagaaga | aggagacaaa | cacacaagag | ttttatacta | gttcagcaac | aacctgtgcc | 360 |
| taca | | | | | | 364 |
| | | | | | | |
| <210> | 4915 227 | | | | | |
| <211> <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat: | ions | | | |
| <400> | 4915 | | | | | |
| ntntggagta | gaaacatggg | accaaatcat | tntatttcag | atagtcgtat | ctagtcaagg | 60 |
| tctgagagac | catacaagtt | ttctagcgat | ttctaattat | atgggccatt | aagtctatca | 120 |
| tatgctgaca | atagccgaga | agcccatgaa | tttcttcggg | ggcggagtaa | gtgtccgcca | 180 |
| ttgccttggc | cttggctaac | aatcggggaa | gttcttgact | cccgttc | | 227 |
| | | | | | | |
| <210> | 4916 | | | | | |
| <211> <212> | 390 DNA | | | | • | |
| <212> <213> | Glycine ma | x | | | | |
| | | | | | | |
| <400> | 4916 | | | | | |
| agcttattac | tgcttcttgg | atggatactc | tggatacaat | tagattactg | tggaccccaa | 60 |
| ggatcatgag | aagacgacct | tcacatgeec | : ttttggtgtc | tttgcctaca | gacagatgtt | 120 |
| gtttggatta | tgtaatgcac | ctgccatatt | tcagatgtgc | : atgttggcca | ttattgcaga | 180 |
| tatggtggag | ttggagcata | aagcctaatg | ggccctcaaa | ctgcttaact | ttgattaagc | 240 |
| tacatctaga | gagaagatga | agttacagtt | gctagagtta | ı gaagaaataa | ggatgaacgc | 300 |
| atatgaatca | tccaagattt | : ataagcaaaa | gatgaaggcg | ; tatcatgaca | agaagttact | 360 |
| aagacaaaac | ttccagccag | g gacaacaagt | | | | 390 |
| | 4017 | | | | | |
| <210> <211> | 4917 378 | | | | | |
| <211> <212> | DNA | | | | | |
| ~~14/ | 21111 | | | | | |

| <213> | Glycine max | | | | | |
|-------------------------------|---|------------|------------|------------|------------|-----|
| <400> | 4917 | | | | | |
| ctaagcttta | gaaaacatga g | cctaacctt | ttaattaaat | aggtcagttc | aagtcagact | 60 |
| ttatgtatgt | taagtcgtag g | cccctgtag | gccggcctga | cctattccca | cccctaacaa | 120 |
| ttacacgcac | tcaaaactta a | atcctaaaa | cattgcctca | aatcctttaa | tttgaaaaca | 180 |
| accctcgtat | ttttttatga g | acatatcgg | aataccactt | catcaaccac | gccaataacg | 240 |
| tataaagcaa | ccacaagata a | acgcatgtt | atttgaaaag | ccataagtac | ctcaatcaaa | 300 |
| atcaatgcac | aaattggcaa t | gatcttacc | aaccaagagt | ccagtttcaa | aatgaccagc | 360 |
| aatgacagcg | gaaaaatc | | | | | 378 |
| <210> <211> <212> <213> | 4918 314 DNA Glycine max | | | | | |
| <223> <400> | unsure at al 4918 | l n locati | ons | | | |
| agctttgagc | caatttttac g | racaataact | ttttactccg | atgtctgatt | gagtcccttc | 60 |
| atatatcgag | acgctcgaaa t | tgaatgttg | aagctctgag | ccaattcaaa | cgacaataac | 120 |
| tttntactcg | gatgtctgat t | gagtcccgt | aatatatcga | gacgctctaa | attgaatgtt | 180 |
| gaacctctga | gctaattcaa a | ıcgacaataa | ctttatactc | ggatgtctga | ttgagtgccc | 240 |
| gaacatatcg | agacgctctg a | aatgaatgg | tgaacctctg | agccaattca | aacgacaata | 300 |
| actttttact | cgga | | | | | 314 |
| <210> <211> <212> <213> <400> | 4919 244 DNA Glycine max 4919 | | | | | |
| tcaacattca | atttcgagcg t | ctcgatata | tgacgggact | caatcagaca | tccgagtaaa | 60 |
| | cgtttgcatt g | | | | | 120 |
| atgacgggac | tcaatcagac a | atccgagtaa | aaagttattg | tcgtttgaat | tggctcagag | 180 |
| cttcaacatt | caatttcgag c | egtetegata | tattacggga | ctcaatcaga | catccgagta | 240 |

| aaaa | | | | | | 244 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 4920 347 DNA Glycine max | ς | | | | |
| <400> | 4920 | | | | | |
| tcgatcattt | tccaatccac | atcattcact | aattattcag | ggattgaata | aaataaacaa | 60 |
| tggccggtgt | cggtcgctat | atggccccga | ctgatattct | tcaaccgaca | ttgcgcaatt | 120 |
| tcttttaaaa | aagctggccg | ataatgtatt | tttaccgtag | aggaagattt | ttgtttttgg | 180 |
| attccctaaa | aaatttacga | tgtaggtcgg | ctaggttttt | ccctgcgagc | tcaacccagg | 240 |
| ttgtgtttcg | gacgacactg | gcatgttctc | atttattagg | ccaagaaaac | gttagcccac | 300 |
| tccggcacca | aaaaacatca | tcaacggaaa | ttgataaaaa | aaaatga | | 347 |
| <210> <211> <212> <213> | 4921 216 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tctatataag | ctgaaccatt | ntatcaataa | acacaagttg | agttntattc | agaaaattag | 60 |
| agtttatctc | ttttatctta | gtgagagtga | ttctcctaaa | ttcttgagtg | attcaagaac | 120 |
| accctggctg | tatcaaagga | ctttcacaac | ctttgtgtgt | tgccctcgtt | ggaaagagtg | 180 |
| attctttcct | tcctttcatc | ttcacccttg | gtcttt | | | 216 |
| <210> <211> <212> <213> | 4922 406 DNA Glycine ma: | × | | | | |
| <400> | 4922 | | | | | |
| agcttgtaga | agcaaaaggc | cagctatggt | gttcaagggt | ggatttgaaa | aggcctatga | 60 |
| ctcaatctca | tgggttttt | tggattatat | gctgcaaaga | atgggttttt | gccacaaatg | 120 |
| gagacactgg | atgtctgcct | gtctcaagtc | agcaagcatt | tctattctta | tcaatggcag | 180 |

| tcctacaaag | ggaatttgct | cctactatag | gtttgaggca | aggggatcct | ttagccccct | 240 |
|---|---|--|---|--|--|-------------------|
| tactctttaa | tatagttgga | gaaggcatca | caggattgat | gagggaagca | gttcataaga | 300 |
| acttatatag | aagctatatg | gctggaaaga | aaaaggaacc | cattaatatt | ttgcagtatg | 360 |
| cggatgacac | aatttttgtg | ggtgaggctg | agtgggagaa | tgttat | | 406 |
| <210> <211> <212> <213> | 4923 313 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tataagaaca | aaattgcctc | aatcatttcc | aaatatgcat | gtgaattang | aagcatcaac | 60 |
| aagaatcaag | ccaaggctat | tctgcaagca | atcaatgggg | caaaacacac | caaatgatta | 120 |
| tgatgatgga | tggctcanat | tctcacaaag | gtaaactcat | cactttcaaa | ttgagcttta | 180 |
| aaaactatca | tgacatgtag | aggaaaatca | atgatttcaa | atcacaaaat | gtcaagaaac | 240 |
| ttttattntc | aaaacaatta | cccatttctt | gaacatatcc | tatnnattaa | agaaaacatg | 300 |
| caaatcgaca | tgc | | | | • | 313 |
| <210> <211> | 4924 | | | | | |
| <211> <212> <213> | 298 DNA Glycine ma | x | | | | |
| <212> <213> <400> | DNA Glycine ma: 4924 | | | | | |
| <212> <213> <400> agcttacaaa | DNA Glycine ma: 4924 tatgttttag | atccaagcac | | tcagatcaaa | | 60 |
| <212> <213> <400> agcttacaaa gatgagataa | DNA Glycine ma: 4924 tatgttttag gatctagatg | atccaagcac aaataatatc | tagatgatat | caaatctaaa | taatatctag | 60 |
| <212> <213> <400> agcttacaaa gatgagataa ataagataag | DNA Glycine ma: 4924 tatgttttag gatctagatg atctaatttt | atccaagcac aaataatatc atagaataaa | tagatgatat | caaatctaaa | taatatctag | |
| <212> <213> <400> agcttacaaa gatgagataa ataagataag | DNA Glycine ma: 4924 tatgttttag gatctagatg atctaatttt | atccaagcac aaataatatc atagaataaa | tagatgatat | caaatctaaa | taatatctag | 120 |
| <212> <213> <400> agcttacaaa gatgagataa ataagataag ttctagattc | DNA Glycine ma: 4924 tatgttttag gatctagatg atctaatttt aagcccaatg | atccaagcac aaataatatc atagaataaa cttgattcaa | tagatgatat ttagtctgcc gcccaatgct | caaatctaaa | taatatctag ccaagcccaa ctgaaattag | 120 180 |
| <212> <213> <400> agcttacaaa gatgagataa ataagataag ttctagattc | DNA Glycine man 4924 tatgttttag gatctagatg atctaatttt aagcccaatg caaattagct 4925 221 DNA Glycine man | atccaagcac aaataatatc atagaataaa cttgattcaa gaatggtccc | tagatgatat ttagtctgcc gcccaatgct aaataataaa | caaatctaaa ctcttcaagt tcattaattc | taatatctag ccaagcccaa ctgaaattag | 120 180 240 |

| <400> | 4925 | | | | | |
|----------------|-----------------|--------------|------------|------------|------------|-----|
| tgtgagtatc | tacatgagat | gaagcataga | gggttgcaac | ctaatgttgt | aacttatagt | 60 |
| acctaattga | ttcattttgc | aaggcangca | tgacactgga | agcaaataaa | tttttttgtt | 120 |
| gacatgatac | atgttggtct | tcaacccaat | gaatntacgt | atacatctct | aattgatgca | 180 |
| aatcgtaaaa | tacgtgatct | caatgaagca | ttttatctgg | a | | 221 |
| <210> | 4926 | | | | | |
| <211> | 347 | | | • | | |
| <212> <213> | DNA Glycine max | ¢ | | | | |
| (213) | Grycriic maz | ` | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctnttagg | ctgattggct | gctttgttca | taggagattt | ctagcctttn | ttcatatcta | 60 |
| tagtgtgtaa | taaaaaggga | ccaatagttg | tacagtttga | catataagaa | ataccaagaa | 120 |
| aaattatatt | ctgattacat | gaaaaccctg | aatatatcaa | aatcatatat | tacatattat | 180 |
| atataacaac | catcaagacc | aaaccttgtc | ctattaggtg | gtgctagtta | gctacataaa | 240 |
| tcaaatatat | tcagagtaag | gtccctttta | attttatatg | caacaataag | aaacataaga | 300 |
| aagaaatatg | tntattgtat | catgtcaaag | ttaagcctag | tactaaa | | 347 |
| <210> | 4927 | | | | | |
| <211> | 408 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> <400> | unsure at 4927 | all n locat | ions | | | |
| tgtaggatta | tggggtaccc | atcacatgtg | gtactaggtg | gcggtcgggc | gatggtgcac | 60 |
| aacaagtttt | ccacatccac | aaatcgcaca | taaacccaca | atcccctgtt | gcccacctcc | 120 |
| aactgagctc | acgtactccc | acgtagccca | tatcctcgtt | tctctcaaca | ccgggtcccc | 180 |
| atcaatcctc | ccaagcttcc | ccaacatcca | agtaattcaa | cattcaaaca | gcacanacta | 240 |
| tcacagccaa | gaaaacaggg | caaaggcaga | aaactctgcc | caaaacacca | accaaaatca | 300 |
| cagcttttcc | cacttaaaga | ccccagtaac | atttcccttc | gtccaattcg | ttaaccgttg | 360 |
| gatggagtga | naaatntact | adaadtetet | agtacataag | cctacatt | | 408 |

| <210> <211> <212> <213> | 4928 405 DNA Glycine max | | | | | |
|-------------------------------|---|---------|------------|------------|------------|-----|
| <223> <400> | unsure at all n 4928 | locati | ions | | | |
| atatatctaa | tcgaccattg gcac | tactgt | tcctgtgaga | gatttggatg | gacatgcgtg | 60 |
| tgtgatacgc | ttctatatgt gaat | catctg | atggcctcta | atcaagatga | aatgagtgac | 120 |
| cttactgctt | ctttttgatt cngc | ctcacg | cgccatttta | agactgtgat | gctgattttt | 180 |
| caaccgtata | atgacccgtg catg | agaaga | aatccctcac | ccttgtacac | caagaggagg | 240 |
| atgaatctaa | tatattgttt tacg | tgctga | gaaaaaagct | tatatgttcc | catgtctgag | 300 |
| tgtctaagat | cccaagtaaa gttc | taatga | accataatgt | gccttgtcgg | tgtatatgac | 360 |
| cgcatagctt | ttttttgccc ttaa | cattat | tattatcctc | catct | | 405 |
| <210> <211> <212> <213> <400> | 4929 248 DNA Glycine max 4929 | | | | | |
| | cttactgtta tctg | aaaaad | atcttaagca | cattagcatc | caaaatagaa | 60 |
| | atgaccaaat ctaa | | | | | 120 |
| | gtaacccaca aaaa | | | | | 180 |
| | agcattgttt taac | | | | | 240 |
| | ageactytet taac | caccea | caagtgacta | ceggueece | | 248 |
| agcccact | | | | | | |
| <210> <211> <212> <213> | 4930 102 DNA Glycine max | | | | · | |
| <400> | 4930 | | | | | |
| agctatgtat | ctattacact agto | ttgaat: | tcttattacc | caagagatat | tcagaagata | 60 |
| actttcaaga | gtcacatcta ttcc | ataggt | ttatgaatgg | CC | | 102 |

| <210> | 4931 199 | | | | | |
|----------------|-----------------|----------------|------------|------------|------------|-----|
| <211> <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <400> | 4931 | | | | | |
| gagaatgttt | ctctcttctt | gattttcatc | ttttttaca | gttatactct | atcttttatc | 60 |
| tccattttt | tcattctatt | atctcctttc | atgctctttc | ttttcatcaa | tattgctttt | 120 |
| ctctgctatt | ctctctcgat | ctcttttcac | tctcaattta | atttgatcct | tacaaacctt | 180 |
| acttggaaac | aaatttgtg | | | | | 199 |
| <210> | 4932 | | | | | |
| <211> <212> | 447 DNA | | | | | |
| <213> | Glycine max | < | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctnggaat | gaggtttgct | aaccatgagt | agataatggc | tggagagcca | gcagctggaa | 60 |
| acttggaaca | aatggatgaa | gatgttgaag | ctgaagctcc | ataagagcat | gcacatcaat | 120 |
| gagtcctttt | gagtcactca | tgattcagaa | gatggacgct | atgcttcacc | tccgtcaata | 180 |
| gcacttagtt | gaagttcaca | attcgctgga | gaacataact | acccggctgg | aaaacataga | 240 |
| tactaggctg | acccttagca | acctcctaaa | ccccgatgag | gatgaagctt | agttatgttt | 300 |
| ttaggtgctt | agttcagttg | cttatatttt | ttgaatgttt | gtgtgtcttt | gattaagaag | 360 |
| ttaaggtttc | taatgatagt | ttaatgtttc | tatgtattgg | tctttaatga | atgaaatgct | 420 |
| atggtatttt | cccttttcac | attatat | | | | 447 |
| <210> | 4933 | | | | | |
| <211> | 281 | | | | | |
| <212> <213> | DNA Glycine max | × | | | | |
| 14137 | ory orne mar | · · | | | | |
| <400> | 4933 | | | | | |
| | gagcacaaga | | | | | 60 |
| | gtcttccatt | | | | | 120 |
| ttgttctaaa | tgttgttaac | atgattcttt | aaaatttcca | ccgattaaac | ttgctataga | 180 |

| agttagattt | gattttctat | ggttcaaatt | tcttggtctt | gttcttgaac | catgaattct | 240 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gttgaagtta | aggtcctttg | aacttttgcc | tggtattttt | t | | 281 |
| <210> <211> <212> <213> | 4934 382 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttgcctc | agagaggtcc | aagaaggata | atgcggccga | agggactagt | tccgctcctg | 60 |
| agtatgacag | tcaccgcttt | aggagcgctg | tacaccagta | gcgcttcgag | gccatcaagg | 120 |
| gatggtcgtt | tcgacgggag | cgacgcgtcc | aactcaggga | cgacgagtat | actgatttcc | 180 |
| aggaggagat | agggcaccgg | cggtggacat | cactggttac | ccccatggcc | aagttcgatc | 240 |
| cacaaatagt | ccttgagttt | tatgccaatg | cttggccaac | agaggagggc | gtgcgtgaca | 300 |
| tgaggtcctg | ngtaaggggt | cagtggatcc | cgtttgatgc | cgacgctatc | ggccagctcc | 360 |
| tangatatcc | gttggtgttg | ga | | | | 382 |
| <210> <211> <212> <213> | 4935 260 DNA Glycine max | x | | | | |
| <400> | 4935 | • | | | | |
| tcaacctaga | ggagacgaac | cattccaagt | gttggagaag | atcaacgaca | atgcctacaa | 60 |
| gattgacttg | cctagtgagt | ataatgtaag | tgccactttc | aatgtgtctg | atctatctct | 120 |
| ttttgatgca | gatggaagag | ccttggattt | gaagacaaat | ccttttcaag | gagggagtga | 180 |
| tgaggacata | accaagggca | aggaccatga | agcacttgaa | ggtcccatga | ccagaggcag | 240 |
| acttaaacaa | gcccaacaca | | | | | 260 |
| <210> <211> <212> <213> | 4936 436 DNA Glycine ma: | | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |

| agcttataag | aacaaaattg | cctaaatcat | ttccaaatat | gcatgtgaat | taggaagcat | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gaacaagaat | taagccaagg | ctattgtgca | agcaatcaat | ggggcaaaac | acaccaaaag | 120 |
| attatgatga | tggatggctc | aaattctcac | aaaggtaagc | ttatcacttt | caaattgagc | 180 |
| tttcaaaact | atcatgacat | gtagaggaaa | aacaaggatt | tcaaatcaca | caatgtcaag | 240 |
| agacttttat | tttcagaaca | attaccaaag | cttgatttgt | gagttgattt | tagccttggt | 300 |
| ttcactttga | ttattagtca | attaattcaa | ggaaactttc | aaagaaaaac | gtctgattga | 360 |
| tttttcttga | ttattntatt | attttttca | agatattntg | attattntat | tattattttg | 420 |
| ctttttttg | tttaaa | | | | | 436 |
| <210> <211> <212> <213> | 4937 309 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ntannaattg | aattaaaaca | ttcagaaact | gctggtaatc | aattaccata | tatgtgtaat | 60 |
| cgattacaca | gtgcaaattt | tgaattcaaa | ttttaatagc | tgttgtaaat | cagttttggc | 120 |
| cactggtaat | cgattacatc | ctctggtaat | cgaataccag | agagtaaatt | tgttgaaaaa | 180 |
| aactttttaa | cttaaatttc | ttggccaaac | cttttgctac | ttcaattgga | attcccttcc | 240 |
| tatttaatat | accctttcta | agactctaaa | gactgtcttg | atcatccatc | ttgaatatat | 300 |
| ttaatttct | | | | | | 309 |
| <210> <211> <212> <213> | 4938 376 DNA Glycine ma. | × | | | · | |
| <223> <400> | unsure at 4938 | all n locat | ions | | | |
| agctnntaac | aaattttctt | tgtgggaaat | tatccatgtt | tggttgacat | ggtcaacaaa | 60 |
| cattggttat | gctgaacaaa | caatttcaaa | cttcttaagg | caatcatcga | aatgatcctt | 120 |
| aaaaggacaa | tcaaccaaac | tccccagac | atccatcaca | taatcccatg | catttttttg | 180 |
| accaactaga | gatttacatt | ntaccttgac | attcttgtca | atgtgaaacc | tacacaacaa | 240 |

| gttggtacac | ccagggaata | cagttttcac | tacattcatc | aacgttaggt | ctctatcggt | 300 |
|----------------|---------------|----------------|--------------|---------------|------------|-----|
| aacaataact | ccaaggagga | catcacatct | tagaaaaaga | cattgaaacc | gttctagaga | 360 |
| tcanaccata | ttattt | | | | | 376 |
| | | | | | | |
| <210> | 4939 | | | | | |
| <211> <212> | 347 DNA | | | | | |
| | Glycine max | < | | | | |
| | | | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| <400> | 4939 | | | | | |
| ntgtggcact | ctgttacaca | cgtcagccct | ccatgtcagt | cctggcacag | gagcacatat | 60 |
| | ++ | a at at as sat | gagagetat | ctctaaccat | ttatattatt | 120 |
| ateatgeeet | LagCaallgg | acticidact | gacaggccac | Cccaaccac | cacaccacc | 120 |
| tgaatatatt | gcaatctcct | tatcacgtgg | caggtattca | attatctcta | agctacacat | 180 |
| | | | tt aget agaa | at agat 22t t | atottotaao | 240 |
| tatctataag | CCataattat | ttacttgtca | CLacciacaa | gtcggtaatt | accergeday | 240 |
| gttgttacaa | caccgtaata | gcccctacaa | acaatatcct | gcaacttcta | ctctactcta | 300 |
| taagtatcag | gtttcatctc | actcttttca | tactcattca | ttactct | | 347 |
| | | | | | | |
| <210> | 4940 | | | | | |
| <211> | 319 | | | | | |
| <212> | DNA | | • | | | |
| <213> | Glycine ma: | x | | | | |
| <223> | unsure at a | all n locat | ions | | | |
| <400> | 4940 | | | | | |
| tattaatasa | 2012012202 | tcatcattt | aacgtctatt | ntatcataac | ctatottaaa | 60 |
| tetteetgae | actactaaca | ccaccacccc | aacgcccacc | neaceacaac | ccacgccaaa | 00 |
| ataagtgtgg | tgatatattt | gtaaataaat | tgagttcgtt | aatgtcattt | tttcaaagaa | 120 |
| | at at agot at | taagatagat | ++++++++ | ataaaaatca | atattatta | 180 |
| ccaatgtttt | gigicgaigi | taacaccggc | | acaaaaacca | acgeegeeeg | 100 |
| atgctcgtta | acattagctt | ttatagaaat | cgatgttgtg | ttttttccta | aattaaaaaa | 240 |
| acccaatcta | tttcactttc | ttattcttac | gctcactctc | accactctcc | ctcttatcta | 300 |
| | | | | | | |
| aaaccctctc | attgctcta | | | | | 319 |
| | | | | | | |
| <210> | 4941 | | | | | |
| <211> | 403 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma: | x | | | | |

| <223> <400> | unsure at all n locations 4941 | |
|-------------------------|--|-----|
| ntgatgtcta | tataaagctc anagatgttt gtcatgaagt tgtcgaatca ctagagaatc | 60 |
| atctgagtca | aaatgaacaa agtgttgtaa tgctgtcagt ttagttggac gacaaaaact | 120 |
| tgagtgaatt | gagtgaatct tagctctgct aagcagcaag tttccattgt atccgagctt | 180 |
| attgtgtaaa | cattccttga gtgattagaa tacatattct atcaaacatc tatttttgtg | 240 |
| aaagccagga | gtgacttcat gacaaaaaat acttgggtct taatctcatg gggagattaa | 300 |
| gggtagagtc | agaaatgacc tagagattac ttgtagccag aagtgacata gagaatactt | 360 |
| ggttgtaatc | aaagttttga ttagtggaac ccttcaagtt ttg | 403 |
| <210> <211> <212> <213> | 4942 372 DNA Glycine max | |
| <223> <400> | unsure at all n locations 4942 | |
| agcttaaggg | ttggatattc tagtgtaact tatctctcta ttatgttaaa ataagagcgc | 60 |
| acgcttattc | taatgtaata acgagatgtt cggattaagc aaattctgga agttacatgg | 120 |
| aagttactaa | agcttccatc aacggtaatt tttaaaaaaa aataacttcc atcatccgcc | 180 |
| aaaaaccacc | ttttctttga tcataaataa ttattctggt tcacaaagca taacgggtga | 240 |
| caaaacatac | aagaccaaaa caaaactctt gaattataat cttctgattn tatccgattg | 300 |
| aacaattttg | attgaacccc gaaatttgat tcaatctgaa agtggtatac acgacttcag | 360 |
| aattatccag | r ta | 372 |
| <210> <211> <212> <213> | 4943 525 DNA Glycine max | |
| <223> <400> | unsure at all n locations . 4943 | |
| cgagtcacgc | cnncnatgag acgcctgtca tttagatgac gctagcatat acgtgacact | 60 |
| atagactaca | a togagactgt gacottgago cagtogttga gaagatatat atatogagac | 120 |
| aagcggtact | gagatttact tgcactggtg agaatcatgt ttgagccacc aatcatgagt | 180 |

| tatgaactca | tctttgaatg | atgcatattg | cagactcttt | tatacatcga | ctctcacaca | 240 |
|---|-----------------------------------|-------------------|------------|------------|------------|-----|
| tctttgaagg | aatgtttcaa | gatctatcca | cagacattgc | tgatgcatca | ctctatagct | 300 |
| ctctgaacag | atgctatcaa | caccttcttt | tacacagaat | gtactctagg | cacggacttg | 360 |
| tgttatctag | tcttttcaat | cactgatgct | ctggcgaaaa | acgacagact | aaccggctga | 420 |
| agctttttga | cactcttctt | ctttgccaaa | ggaccacaaa | ctgtggaagc | caagctcata | 480 |
| atgaatcacc | atggatcaaa | cgtgtgttga | tgataaccaa | gaagg | | 525 |
| <210> <211> <212> <213> <223> | | k all n locati | ions | | | |
| <400> | 4944 | | | | | |
| agcttagttc | gaggtactta | cccattgaag | attgaagaac | gatgaagaac | gaatgaagaa | 60 |
| cgtcgaaaaa | ccgtcgaaac | ctttgcgaaa | ttccttacgg | gaacgtttcg | gaagcgcctc | 120 |
| ggcttagatt | ttcttcacgg | aaaccatttt | tccaagccaa | ttcgaaagag | agagaagtgc | 180 |
| ctaaggggct | gaaccctttt | ttacttcact | tctcccccta | tttatagaaa | attgggggag | 240 |
| aagcttgcac | ccagctcgcc | caggcgagca | tgggtgcttc | ctccagaagc | aacagccttc | 300 |
| tggaggaatc | ttctggaggg | cccaagtggg | cctggtttct | atttgcaccc | ccatttttac | 360 |
| taagtacacc | cccctggcct | tttttggtga | ttctttnttc | gtaaagt | | 407 |
| <210> <211> <212> <213> | 4945 362 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tctcaggagg | tgagcttagt | tnttagatgg | gtgtgtgtåg | ctaaactcta | gcttctcaag | 60 |
| gaagttttct | caaagaagct | tctcaaggaa | gttttcttaa | gaaagcttct | caaggaagtt | 120 |
| ttcttaagaa | agcttttcaa | ggaagctacc | tagtctataa | atagaagcat | gtgtaacact | 180 |
| tattgtaact | ntgatgaatg | agagtcttgt | gagacacaac | tcaaagttca | acttctctcc | 240 |
| ctttntcttc | cttcaatttc | gtgctcccc | ctctctctt | ctctcccttt | ttcttttctt | 300 |

| tcattgaagc | catctctcca | acctctttat | cagtctcatc | ttgtggtgaa | gctccttctt | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ca | | | | | | 362 |
| <210> <211> <212> <213> | 4946 395 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttcgtat | canatgacac | agaaagcgtg | tttctgcttt | gcgcatggga | gatgttcggg | 60 |
| tgacaccttg | catgcacgaa | ttttttcact | aaaatcgata | attttacaaa | actatgtatc | 120 |
| agtatcgata | atttaaaaaa | ttatttacgt | gtaagggtga | tttttgccac | tccaaaatct | 180 |
| tagttgataa | aaaatactct | cattataggt | aaataatttt | caaaataccc | atattggtaa | 240 |
| ataatttaca | aaattatcca | ttttagtaaa | aaaaaaatag | tggtgcatgc | acctttgaaa | 300 |
| tgcaatagaa | attatgagag | taaagattta | ttagaaagcg | tgttttatca | nactttaatg | 360 |
| actaacacag | acaatataac | tctcttcaaa | cttat | | | 395 |
| <210> <211> <212> <213> | 4947 295 DNA Glycine ma | × | | | | |
| <400> | 4947 | | | | | |
| | | | | | gtagggtgga | 60 |
| | | | | | ccccacatat | 120 |
| | | | | | ccttgtttcc | 180 |
| aaggagtttg | ttattcatag | tgatcatgaa | tcacttaagt | acattagagg | acaatgcaag | 240 |
| ttaaacaaga | ggcatgcaaa | atgggtagag | ttccaagagc | aatttctata | tgtta | 295 |
| <210> <211> <212> <213> | 4948 434 DNA Glycine ma | × | | | | |
| <400> | 4948 | | | | | |

| agcttaaggt | cactttacaa | tacacggtcc | ttcaagcaag | taagatgttt | catcttctat | 60 |
|-------------------------------------|--|------------------|------------|------------|------------|-----|
| tcatttggtg | gactttatac | ttcaaggtat | tatcttttta | tttttttggg | atagtcatta | 120 |
| ttattatgtg | gtaagagttt | atacaagtct | agtttactta | ataaggggtc | aattgatgga | 180 |
| ttacccaaac | tagtaagcca | cctactttgt | aaaccattac | cattaataaa | gttatgtgtc | 240 |
| ttcttaaaag | tttcacataa | tttgttcatt | ttaattttga | ctatttatga | gaaggtgttt | 300 |
| ttaccattta | taatgagaca | atagtcaata | tttatttatc | acattctcat | ataaaaataa | 360 |
| atctttcact | aaatacattt | cttctttctc | tttatgtgtg | tatgtgtatg | tgtaattaac | 420 |
| atacatttag | tgat | | | | | 434 |
| <210> <211> <212> <213> | 4949 430 DNA Glycine max | | iona | | | |
| <223> <400> | 4949 | all n locat: | LOHS | | | |
| taacattgtt | ctgtgacctg | agttccaaat | aagattctca | ttcttaacag | gattatttta | 60 |
| tgctgtgaat | tactcccagg | acttgggtgt | caatgatagt | agcatgtata | aacactcgga | 120 |
| tgaaaagcta | aaatcactta | gaatgtgttt | gngttgcatt | ttcattttct | gtttttattt | 180 |
| tcacaagatt | agaattataa | aaatatgttt | ggtttgactt | cttgttttct | gctttcaaga | 240 |
| aataaaaaca | ctgaaatgcg | ttttcaaaaa | gaaatgtatn | tttatatttg | cttaaaatta | 300 |
| cattccttgt | caccgcgttt | tcatgttatc | caaaatgagg | tgtctaagtt | caactgaaac | 360 |
| actgaaaacg | agatttatta | tttcagtttt | tgttcggtga | gaaaaatttt | actgaaatgt | 420 |
| ttcaaaatca | | | | | | 430 |
| <210> <211> <212> <213> <223> <400> | 4950 300 DNA Glycine mas unsure at 4 | x all n locat | ions | | | |
| | | aacactacgg | cgcttgcatt | ctcataagtt | ttaggcagat | 60 |
| | | | | | | |

atgatatttt aaaaaaagtt tatgagatcc attcattgca aaaaggatgt attatgcatg 120

| | | • | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gtgatatcat | gattttggat | agtaattaat | tataactcat | tatttagagt | aaattaatgc | 180 |
| gacctcctat | tttttaatat | ccttaactaa | aacaactgta | tcaattaaag | atataagtgg | 240 |
| ttaattaagg | aatgaggang | gcgnataata | aagagagaca | gagagaaaaa | ttgttgatga | 300 |
| <210> <211> <212> <213> | 4951 244 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tgagctgtaa | ggtgatggcc | tagaaagagt | ttagtctcta | ataaaccttt | gaggttgagg | 60 |
| taaggcatan | gatangtcca | tcatatctta | tgcttgaatg | caatttggct | canataatgg | 120 |
| ggcattatat | tatcaagcat | ggaactccat | gtcagtttgt | caaagagtat | tcaatatcat | 180 |
| gttgagtaac | catcaccaaa | aagtttaaca | ctatcaagta | catgaacata | acgatcagtc | 240 |
| gcaa | | | | | | 244 |
| <210> <211> <212> <213> | 4952 287 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| agctngtcca | atgaggtgac | aatgaaaata | cctagtgtta | ctacctgata | tacagttttt | 60 |
| gctgctcgtt | ttattgtcaa | ttccaactgc | atcgatgcat | ctttaacaag | caggtaccac | 120 |
| gaaccagagc | agcaaccaag | ttgaccttct | ttaaactcta | aaataccata | aaaaacaagg | 180 |
| tatgtaaaat | gtgcaactag | tcagatatta | atcagatcct | tcttaaacca | taaattaaga | 240 |
| cattttccac | agcaagccca | ggaaggcatt | tcaatggcta | aaaaatt | | 287 |
| <210> <211> <212> <213> | 4953 370 DNA Glycine ma | x | | | · | |
| | | | | | | |
| <223> <400> | unsure at 4953 | all n locat | ions | | | |

| tgtccgatgg | gagttaacaa | agtaccatgg | tatttgccag | ttaagaatgt | cccatctaat | 120 |
|----------------|-----------------|--------------|------------|------------|------------|-----|
| tgcacaagtg | gcttgcaata | tttgaagcct | tcaatgcatg | gattaaagtt | gtgtgttcat | 180 |
| ggtttgggga | ttaaggcttg | aggtttagga | tttagagttt | actgatactt | gaggtaaagt | 240 |
| tgtgtgttag | gatttacgat | acaatgagaa | agatatttgg | actattaatg | agatatttaa | 300 |
| tcaaatggac | ttattagata | taaataggga | aagaaggata | tganatattc | tctactatat | 360 |
| tatgaccttt | | | | | | 370 |
| | | | | | | |
| <210> | 4954 | | | | | |
| <211> <212> | 399 DNA | | | | | |
| <212> | Glycine max | Κ. | | | | |
| | _ | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| <400> | 4934 | | 3, 3, 5 | | | |
| agcttcaatc | tttgcttgga | gtttaattcg | agatcgattg | ccgactaagt | ctaatctgcg | 60 |
| gagaaggcaa | atagatataa | gtgacagcct | ctgtcctttc | tgcagtatta | aggaggaaac | 120 |
| tgcatctcat | ctcttttttg | actgcagcaa | aacacagcat | ctttggtggg | aatccctatc | 180 |
| atggatagga | acttcggggg | cataccctat | aaatcctacg | caccactttt | tgcagcacaa | 240 |
| caatgggatg | aatggtggga | agaaatacaa | tagatggaag | tgttgatggg | ttgctctana | 300 |
| ttggtccatt | tggcagcata | ngaataaggt | tattattatc | aatgctccat | tcaacggcag | 360 |
| tatgttgctg | gaagatgcac | tatattnggc | atggacatg | | | 399 |
| | | | | | | |
| <210> | 4955 | | | | | |
| <211> | 298 | | | | | |
| <212> | DNA Glycine max | v | | | | |
| <213> | GIYCINE IIIa. | ^ | | | | |
| <400> | 4955 | | | | | |
| gaaagttagt | tctaccagtg | ggacactact | cttaaaacaa | aaatggcata | caacctcctc | 60 |
| ccataaatac | aaacatcaat | gtaaatttag | agcaagctta | tgcgcatatt | tccttacgaa | 120 |
| cgttcacttg | cacaagacat | cctattaact | aagaaaaatg | cacccatata | caatcaaggt | 180 |
| agcttcatta | cctagattat | ttacatgtac | ttccaaggtg | tatttgttat | tacatcacac | 240 |
| | | | | | | |

298

acgactcctt ggctgaattt acatacatgc atactcaaag cattttgggg tacccaaa

| <210> <211> <212> <213> | 4956 380 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 4956 | |
| agcttatgat | tccatttcct gggaattctt gtattggatg cttaagtcca ttggctttcc | 60 |
| agcccagttc | tgtacttgga tcatggaatg tgtttcttcc acttccttta gtgtggcagt | 120 |
| caatggatcc | atttatggtc acttcaaagg gcagcggggt cttagacaag gggatcttct | 180 |
| ctccccttat | ctgtttgtgc tctgtttgga gtacttttcc agagatatga gcagcctcaa | 240 |
| ggaagatgcc | aattntaaat ttcatcccaa ctgtgcaagt attcagctat ctcatttggc | 300 |
| ttttgcagat | gatattatgc ttttatctag aggagatatc ccttctgtgt caactaatgt | 360 |
| tgccaagctt | caacacttct | 380 |
| <210> <211> <212> <213> | 4957 374 DNA Glycine max | |
| <400> | 4957 | |
| tgtacacatg | ctaaggtttc tccttatctt caaatctatg tggctgcttc acataaacct | 60 |
| cttcatttat | gaatccattt ataaatgcac tcttgacatc catctgatat agtttaatgt | 120 |
| ctttgtgtgc | tgcataggct aagagtattc tgacagcttc aagtcttgct actggtgcaa | 180 |
| aggtttcatc | aaagtcaatc ccttctttgt tgattgtacc catgagcaac tagtctagcc | 240 |
| ttattcctaa | ccacttctcc tttttcattg agcttgtttt tgaataccta cttagttcca | 300 |
| atcaccgact | aaatcttatg agggggaaca tgattttaga ccttgatcta acgaactggc | 360 |
| tggttcttct | tcat | 374 |
| <210> <211> <212> <213> | 4958 408 DNA Glycine max | |
| <223> | unsure at all n locations | |

| agctntgatc | taccaccacc | gccgccacca | tcatcatagt | tntctattat | ttaatattac | 60 |
|-------------------------------------|---|------------------|------------|------------|------------|-----|
| tagtactttg | atttccagcc | atgtatttgg | ctatattatt | atgatatttg | aacaatttac | 120 |
| tatttcttta | tttgcatggt | atgtttgaac | aaaaattaat | tatgttattt | gaactatgtg | 180 |
| gttttatata | tttgatctat | tcatggttct | tgcttcatga | tttggtttat | acttttccat | 240 |
| gaatgttgtg | tggatgctta | gttgtatttg | aatgcttcaa | acttgttaca | cactttggct | 300 |
| ttttgttgat | gccaaagggg | gagagaaata | gggattaaat | caataactca | catgagtaat | 360 |
| caacttaatt | ttaagagaag | cataaatttc | aaaacaaagg | gggagaat | | 408 |
| <210> <211> <212> <213> <400> | 4959 357 DNA Glycine max | x | · | | | |
| tgtagaatgg | ctagacatga | tacatgtcgg | ggcttggttt | ggtgtaaggg | taaaatggat | 60 |
| gccccacatt | atttccatga | cacaaatgca | gaaatgatga | tttggagact | atatgcagaa | 120 |
| ctggtcatgc | atgcatctat | gccgacactc | aaatgtcaaa | tctttatggt | catgtgatgc | 180 |
| tagggctcgg | gattcatttc | ctctatatta | atcaacccaa | cgttaccaaa | atatgttctt | 240 |
| ttatcaattt | gtacattcat | ccgagtccat | tttgggcgtt | cgggaaaatc | ttacagcatt | 300 |
| cacccttcat | gtgtagacac | atgttgcaaa | aactagttat | gatcagtgaa | tttttc | 357 |
| <210> <211> <212> <213> <223> <400> | 4960 329 DNA Glycine ma unsure at 4960 | x all n locat | ions | | | |
| tataagcgcg | ggtctgggag | acaaatgtca | agtgttcgcg | atatgcgaag | atgatgttcc | 60 |
| gagtactttg | gatttggtac | gaccatgccc | ttctgaattt | caactgggaa | aatggcgagt | 120 |
| ggaaaaaccc | cccgccttt | acgccaccag | cctatatgta | acctttacgg | gtgtaaaagc | 180 |
| tctataattg | ggcctaggct | ttagaagttt | tccttttggt | aagctttgtg | tcttttggtt | 240 |
| ntgaatttat | aatacaagga | tctttcttca | tctgttccta | cgtctctacc | cattctcatt | 300 |
| catttgcatg | tttacttctt | tttctgaaa | | | | 329 |

| | 4961 373 DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 4961 | |
| tggactgtgc | tannggagaa aacaaatgac caaagtgaac catgagccat ttctatggca | 60 |
| aaattgggtg | ttgaagagtc aaatattgat tcggcggaat tttaggtgta aatccagttt | 120 |
| gagcaagttt | agattgatgt tatagacttg tgtgaagtga gagtttgctc caaatttacc | 180 |
| tcattctcaa | tttcactttt caaacctaaa aaacccattg aattgagggg ttttggacac | 240 |
| ctacattctg | tgttgctgtg ctttaaagct tgacttcngc ttangcatga ttgatacatg | 300 |
| atttgggagt | tgtangaatt gatttgggca agattggatg agaggaagtg tgattttcga | 360 |
| aatatgcact | tat | 373 |
| <210> <211> <212> <213> <223> <400> | 4962 345 DNA Glycine max unsure at all n locations 4962 | |
| agctgcatga | ttatattctc gccctttgtc tagcatattc cttnttatat catcaaaacc | 60 |
| tgcatgaatt | acattetece cetttttgat gatgacgage attatecaat gettgatett | 120 |
| tttgacatca | tcaaaatctt catgatttac attctccccc tttttgatga tgataaccac | 180 |
| ctataagtta | ggagcaacaa ccaagaaaaa atatctattt gcatatagtg tactccccct | 240 |
| tggttttgga | atgtttgctt atatgagaca attgaagatt atatactttt catatataaa | 300 |
| aagttgtctc | atacagaata gaccattttc cttctatttt agctt | 345 |
| <210> <211> <212> <213> <223> | 4963 232 DNA Glycine max unsure at all n locations | |

| tgagatgagg | aagtgttgaa | gggtgaaact | tcctgcnttt | attgttgacc | acagagtggt | 60 |
|-------------------------|----------------------------------|------------|------------|------------|------------|-----|
| acctggagat | atgtcgcggg | ggtcaggaga | ccttggggac | gtcaggtggg | gtgctattgc | 120 |
| ccaaaaccaa | tcttgaccaa | tcccgaccca | acccgggcat | agtcggtcag | tgagaacctg | 180 |
| tgatgtacct | aagcaggcga | gctcctggca | gtcaacagat | aaaaggaaaa | ca | 232 |
| <211> <212> | 4964 398 DNA Glycine ma | × | | | | |
| <400> | 4964 | | | | | |
| agcttcaccc | aaacctatgg | tattgattac | tcataaactt | ttgttcctgt | tgcaaaactt | 60 |
| aacaccatta | gagtcctctt | ataattggct | gcaaatttag | attggccatt | acagcaactt | 120 |
| gacgtaaaga | atgtcttttt | aaatggggac | ttagaggagg | aagtctacat | ggactcacct | 180 |
| tctggttttg | aatctcagtt | caatcaaaag | atttgcaagc | ttcaaaagtc | tctctatggc | 240 |
| ttgaaacagt | cacctatagc | atggtttgag | agatttgccc | agtttattaa | gaagctggga | 300 |
| tattctcagt | gtcagagtga | tcacaccttg | cttgtgaaac | actcttttga | aggaaagatg | 360 |
| gttgtattaa | ttgtctatgt | ggatgatatt | ataattac | | | 398 |
| <210> <211> <212> <213> | 4965 248 DNA Glycine ma | x | | | | |
| <400> | 4965 | | | | | |
| tggatttgga | ccttgtcatt | ggacccttca | actcatgaag | tgcttttacg | ttcttgtgct | 60 |
| ttttggatat | ccctctatca | tcccctcctt | cttgaaaaga | atctgtcctt | ggataatgct | 120 |
| cttgggatag | ccctttatca | teegeteett | ctttagaaga | acctatcctc | atatgtgcat | 180 |
| gcaagacacc | tacatcacaa | gaagaaagat | caataacatt | tgaagttgaa | ctaaccccgt | 240 |
| gcttactt | | | - | | | 248 |
| <210> <211> <212> <213> | 4966 68 DNA Glycine ma | x . | | | | |

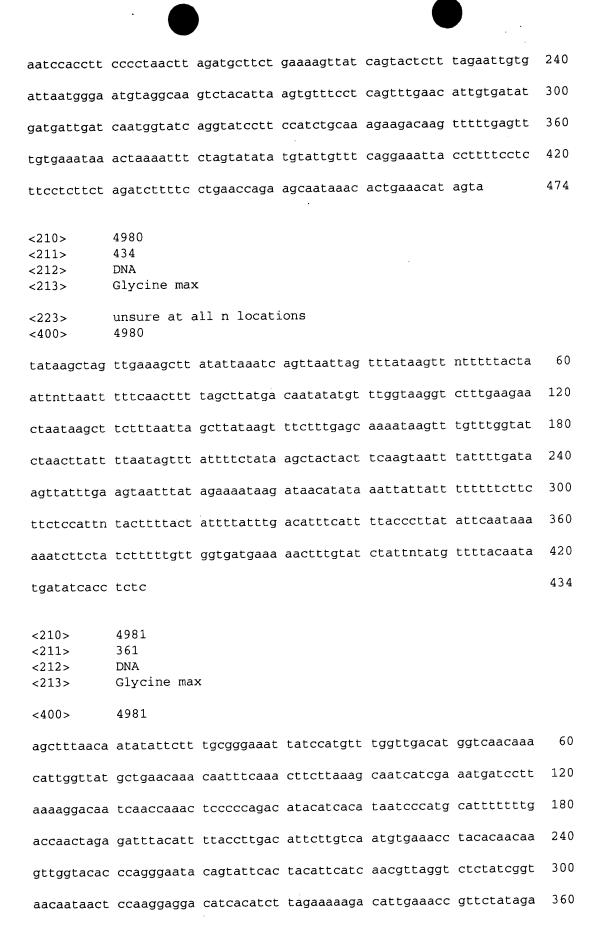
| <400> | 4900 | | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gcttatttaa | ttttaacttt 1 | tatttgatgg | agaatattaa | tttggcacga | atagtaatga | 60 |
| tatttcag | | | | | | 68 |
| <210> <211> <212> <213> | 4967 404 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 4967 | ll n locati | ons | | | |
| tgtcaataca | ttggatcaca | aaatcaatgg | tcgaatttca | aaatcaccga | ctgaactgat | 60 |
| cactcgatat | tgtagtgtta | taaataattt | tttgtatatt | tatataatat | acatattata | 120 |
| aacataatat | ttgtcaatat | tgttacaaga | ataacctcca | tcttagtgta | aggtgtgctt | 180 |
| gtgtcagttg | ctgacgatag | atttgagcct | tgatatgttg | ctttttgtta | atttattcca | 240 |
| ttaaatacga | atatcttatt | ataaatatca | catttgtcaa | tgctaaaaaa | taaaaaggct | 300 |
| ccagggtagt | ggtaagactt | ngttatctcc | catcactgga | gatatattga | tacctatcat | 360 |
| tccacaacaa | ataaaaaaat | tccttcctac | cactntactt | gatg | | 404 |
| <210> <211> <212> <213> | 4968 455 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 4968 | III n locati | IONS | | | |
| tggacgtgac | caatgaaccg | tgcatttgag | gccctgtana | tcctcacctt | ggaataggct | 60 |
| ccacatgata | catggcaggg | cctggatngg | ttcagaggta | acatggatgc | cccacagtat | 120 |
| tttcatgact | ccaaagcaca | aatgatcatt | tggatactat | atgcggaact | ggacattcat | 180 |
| gcctttttgc | ccacactcat | atgtcaaagc | tttatcgcca | tgtgatgcta | cggctacgga | 240 |
| ttcatttccg | ttattttaat | caaccacatg | gttccaaata | tgtcctttca | tcatttgaca | 300 |
| tcactcggtc | cctttgggcg | atgggaaact | tcaatcatca | cctcacgggt | gacactttta | 360 |
| caaactacat | cacatgatat | ttttcaaaaa | gtggaaacct | ctttcaaaca | tgtggtcttc | 420 |
| tattccacaa | attcattttt | tattatttt | ctcac | | | 455 |

| <210> <211> <212> <213> | 4969 386 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <223> <400> | unsure at all 4969 | n locati | ons | | | |
| agcttgaaca | ctgcatcctt gt | tcaatagg | ttgctcaatg | gtttggtaat | tntggagaaa | 60 |
| tccttgatga | acctccgata aa | aacctgca | tgtccaacaa | aactcctgat | acccttaaca | 120 |
| tttactggtg | gtggtaactt ct | ctatgaca | tcgatttttg | ctttgtccac | ctcaatgcct | 180 |
| tgggctgaaa | ttttgtggcc ca | acattatc | ccttcttgaa | tcatgaagtg | acacttctcc | 240 |
| caattcagca | ccagattcgc tt | caacacat | ctttgcagct | gtcataccct | aatttcgtcc | 300 |
| ggggactatc | gtttgttgat ct | tttgatcc | ttgctagtcg | acttacgatg | ttcaaacgcc | 360 |
| agttacagtg | canaacagat ga | atcat | | | | 386 |
| <210> <211> <212> <213> | 4970 336 DNA Glycine max | | | | | |
| <400> | 4970 | | | | | |
| tataccaatt | atgtatatat tt | tttgcttc | atcagttggt | ggatggaaat | gccatcaaaa | 60 |
| tgccaaatga | gtggtggcat gg | gaaactaaa | agctcattaa | ttatttcttg | cattgatggc | 120 |
| ctggattttg | gatgggggca ca | aagcatgtt | aatgctaata | ttacaataag | cacaatttct | 180 |
| tgcatatcct | ttcgatagaa gg | ggtagtggt | attcgtgagt | ccaataaatg | aggcagaaat | 240 |
| gttagaccag | agatgcacat go | ctatcaaga | taatagtcat | agcaattggc | agagataatc | 300 |
| aattacaact | cacatcactt go | ctacgacta | caacta | | | 336 |
| <210> <211> <212> <213> | 4971 131 DNA Glycine max | | | | | |
| <223> <400> | unsure at all 4971 | l n locati | ions | | | |
| tctgcttatg | ccagcaacag tt | tatacctaa | ccatttgant | tagaccaagc | atgcaaaact | 60 |

| ttttaagttc | taattataat | atatcaacaa | actggttaat | tccctaatgg | caaacgggaa | 120 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| gtttcttcat | t | | | | | 131 |
| <210> <211> <212> <213> | 4972 172 DNA Glycine max | τ | | | | |
| <400> | 4972 | | | | | |
| cttagttagt | gttccgtagt | cgaaatgttg | tgcttgactc | ttacattact | ttagtcagag | 60 |
| aaaatttgac | attgggttta | tgtgttgcag | actcatgggc | ttgcagaata | tatagctcaa | 120 |
| gtgagattta | ctttacaact | agatactttt | atatacattt | ttagactaca | ta | 172 |
| <210> <211> <212> <213> | 4973 276 DNA Glycine max | ĸ · | | | | |
| <400> | 4973 | | | | | |
| agcttaacca | atgtcatgtt | aaaaccactt | ttttaagtc | acgtcaagac | cctgtcactc | 60 |
| ttatatattc | atgtgaaccc | agcatatagc | catgagcatg | ctgttatcat | aaaattaaat | 120 |
| tacaacagtg | cccttgaagg | aaagtccaga | aaggtacaat | aagagaaaag | tttagaacac | 180 |
| accaataggt | aaattagttg | catcagctaa | aatgatgatg | caacagtctc | taatgatcca | 240 |
| ataattaact | agctagcaac | ttgtgggtct | tatata | | | 276 |
| <210> <211> <212> <213> | 4974 404 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 4974 | all n locat | ions | | | |
| tgtagaggct | acaacaagat | agtggttcta | gagaataaaa | cagttaatat | agataaattg | 60 |
| gccatggtaa | acaatgacac | tatcataagt | gtgctgctct | attccacaat | attggttntg | 120 |
| gttttcatga | gtgtccaaca | gcatcatcat | tgtattactt | tgcttttaac | agaggccaga | 180 |
| cagctgcttc | tgcaattaag | ttgacatttg | agaataaaat | catgtaatgt | aattcatgcc | 240 |
| cototattos | tataaataat | taaatacaco | catactntat | ttgcanatca | ccgggtagag | 300 |

| ggttgattag | gtagttgttc | anaggctctg | gataatattt | attttgactg | ttaaaattac | 360 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tacaaatttc | tagaatattc | ttacatataa | tatgtatgaa | aatg | | 404 |
| <210> <211> <212> <213> | 4975 414 DNA Glycine max | ς | • | | | |
| <400> | 4975 | | | | | |
| agcttcatct | aactggtcat | acatatgaat | catggccgca | gctccccagg | cataccccca | 60 |
| ctttgaccca | ggtcgcgaaa | agcctctaga | tgtaccacat | gaacatttgt | tgcactcttg | 120 |
| ttagaaaaaa | gagtgcaacc | gaccaggtgt | agtagataag | cacgagctgc | tacaatccat | 180 |
| cgtcgtgcct | gacatctcat | ttcatagatc | tcctgaaccc | atgagaggtg | tacatatgcc | 240 |
| ctgcgcgctc | gtattgactc | ggctctagcc | tcctcaccag | acacctcgag | caactccatc | 300 |
| aacaaaaata | ccgtctcatc | cacggaaata | gcctcgaagc | tgtggaaagc | gccactgata | 360 |
| gggagatgga | ggagtgacga | cacatcatct | agtgtgatcg | tcaactctcc | tact | 414 |
| <210> <211> <212> <213> | 4976 321 DNA Glycine max | × | | | | |
| <400> | 4976 | | | | | |
| ctttgcaagc | tggaatcatt | tatcctatct | ccgacagcca | atgggtgagt | cccgtccagg | 60 |
| tagtcccgaa | aaagactggc | ctcacagtga | tcagaaatga | gaaggaggag | ctgattccta | 120 |
| ctcgggtgca | gaacagttgg | agagtctgca | ttgactatag | gaggctgaac | caggttacca | 180 |
| aaaaggacca | ttttcccctg | ccattcattg | accagatgct | tgaacgcctg | gcaggtaaat | 240 |
| cccactactg | tttccttgat | ggtttttctg | gttatatgca | aattactatt | gctcctgagg | 300 |
| atcaggaaaa | gaccacattc | a | | | | 321 |
| <210> <211> <212> <213> | 4977 458 DNA Glycine ma | • | | | | |
| ~222× | ungure at | all n locat | ions | | | |

| <400> | 4977 | | | | | |
|-------------------------------------|---|-------------------|------------|-------------------|------------|-----|
| agctntactg | cctcatcatt | gctgaagaag | tttaataaac | catcactccc | tactataaca | 60 |
| aattgatcgg | aatttgaaat | tctatggaca | ttcaatgatg | gttgcgtgga | tatgtatggt | 120 |
| gggcttttaa | gatcccgaac | tcgaaggatt | cccatcaaag | catcattcag | atttttctgc | 180 |
| aggagaataa | aataagaaaa | ttaaatctat | gtttggtact | tggtaggaca | aagatttatt | 240 |
| ctttgcaatc | gtccattcac | agacacagtc | agtagattga | attttaaggg | tttataatta | 300 |
| tcacatttac | ttgctaaaat | atcagtaccc | aaaatcttat | agaaacctat | tggctgaagt | 360 |
| gtaagagaga | atactaacct | ttttcaagta | gccaactcca | aaagctcgag | taaccttcaa | 420 |
| tttacctttc | acttttcctn | ctataacgat | cttgggat | | | 458 |
| <210> <211> <212> <213> <223> <400> | 4978 313 DNA Glycine max unsure at 4978 | x all n locat: | ions | | | |
| | | gggaagggac | ggcacttaag | ttttctcaat | ttaacaatat | 60 |
| | | atttgatatt | | | | 120 |
| | | ttggccagct | | | | 180 |
| | | ttttttattt | | | | 240 |
| | | cagcggcttg | | | | 300 |
| aaccttgggt | | | gg | 3 - 3 - 3 - 3 - 3 | 3 33 | 313 |
| ddccccgggc | 999 | | | | | |
| <210><211><211><212><213> | 4979 474 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 4979 | all n locat | ions | | | |
| tegtaceegg | gatccttaag | ttacctgccg | catgcaagct | tgtgagagtc | tnttcactgc | 60 |
| aatttgtctt | ccatctggta | gagttccctg | ataaaagttt | gcaataaata | taaggcttaa | 120 |
| agcatataaa | aagatggtaa | aagtagagaa | tcactaatat | ataccttgta | aacagggcca | 180 |



| t | | | | | | 361 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | 4982 375 DNA Glycine max | τ | | · . | | |
| <223> <400> | unsure at a | ill n locati | ons | | | |
| ntgtggcact | ctgttacaca | cgtcagccct | ccatgtcagt | cctggcacag | gagcacatat | 60 |
| atcatgccct | tagcaattgg | actctcaact | gacaggttat | ctctaaccat | ttatattatt | 120 |
| tgaatatatt | gcaatctcct | tatcacgtgg | caggtattca | attatctcta | agctacacat | 180 |
| tatctataag | ccataattat | ttacttgtca | ttacctacaa | gtcggtaatt | atctgtaagg | 240 |
| gttgttacaa | caccgtaata | gcccctacaa | acaatatcct | gcaacttcta | ctctactcta | 300 |
| taagtatcag | gtttcatctc | actcttttca | tactcattca | tactctccta | attaacatad | 360 |
| ttacttgagc | gtcag | | | | | 375 |
| <210> <211> <212> <213> | 4983 128 DNA Glycine max | ς | | | | |
| <400> | 4983 | | | | | |
| agctttgagc | aaattcaaac | gacaatcact | tttttactcg | gatgtctgat | tgagtcccgt | 60 |
| aatatgtcga | gacgctcgaa | attgaagaac | gaagctctga | gccaaatcta | acgacaataa | 120 |
| ctttttac | • | | | | | 128 |
| <210> <211> <212> <213> | 4984 306 DNA Glycine max | < | · | | | |
| <400> | 4984 | | | | | |
| actcagcttc | gtgatcaatt | tcgagcgtct | cgatatatta | cgggactcag | tcagacaacc | 60 |
| aagtgaaaag | ctattgtcgt | ttgaatttgc | tcagagcttc | gatattccat | ttcgagcgtc | 120 |
| togatatatt | acgagactca | atccgaccac | cgagtgaaaa | gttattggcg | gttgaatttg | 180 |

| ctcagagctt | cggcattcaa | gttcaagcgt | ctcgattatt | acgggactaa | atcagacatc | 240 |
|--|---|---|---|--|--------------------------|--------------------------------|
| tgagtaaaaa | gtattggcgc | ttgaattgct | cagagttcgg | aatccatttt | gagcgtctcg | 300 |
| atatat | | | | | | 306 |
| <211> <212> | 4985 252 DNA Glycine max | ζ | | | | |
| <400> | 4985 | | | | | |
| catggagaac | atgtactaaa | ttactaattg | taagaaatag | gcttctaaaa | aataaaaata | 60 |
| aagaaggacg | attatgaaat | atacagatac | cttccataat | atgatcatat | tatggaatag | 120 |
| atagacggct | attttttcta | taatcaaata | cattaaactt | ttgaacccct | aaaatcagtg | 180 |
| gtcgggctct | agtaggaaca | ctgaagtctg | aacccttcag | accttgacag | acataatcca | 240 |
| tatatagaag | tc | | | | | 252 |
| <210> <211> <212> | 4986 200 DNA | | | | | |
| <213> <223> | | k all n locat: | ions | | | |
| <223> <400> | unsure at a | all n locat: | | gttatcangt | acattcaata | 60 |
| <223> <400> ctgctagtga | unsure at a 4986 aagggettae | all n locat: | ttntgggtgt | gttatcangt | | 60 120 |
| <223> <400> ctgctagtga ttttataaac | unsure at a 4986 aagggcttac tcaatgctaa | all n locat: tcgtgcatgt acataaataa | ttntgggtgt ctaatattat | aatatgtact | aacgacaaaa | |
| <223> <400> ctgctagtga ttttataaac tttagatgca | unsure at a 4986 aagggcttac tcaatgctaa | all n locat: tcgtgcatgt acataaataa | ttntgggtgt ctaatattat | | aacgacaaaa | 120 |
| <223> <400> ctgctagtga ttttataaac tttagatgca tttagtaatt <210> <211> <212> <213> | unsure at a 4986 aagggettae teaatgetaa gtttettata catacaatga 4987 429 DNA Glycine max | tcgtgcatgt acataaataa tactttaaga | ttntgggtgt ctaatattat | aatatgtact | aacgacaaaa | 120 180 |
| <223> <400> ctgctagtga ttttataaac tttagatgca tttagtaatt <210> <211> <212> <213> <400> | unsure at a 4986 aagggettae teaatgetaa gtttettata catacaatga 4987 429 DNA Glycine max 4987 | tcgtgcatgt acataaataa tactttaaga | ttntgggtgt ctaatattat actattctaa | aatatgtact | aacgacaaaa ggaattctat | 120 180 200 |
| <223> <400> ctgctagtga ttttataaac tttagatgca tttagtaatt <210> <211> <212> <213> <400> agcttgccca | unsure at a 4986 aagggettae teaatgetaa gtttettata catacaatga 4987 429 DNA Glycine mas 4987 gagtatgaat | tcgtgcatgt acataaataa tactttaaga | ttntgggtgt ctaatattat actattctaa tatgcttacc | aatatgtact | aacgacaaaa ggaattctat | 120 180 200 |
| <223> <400> ctgctagtga ttttataaac tttagatgca tttagtaatt <210> <211> <212> <213> <400> agcttgccca ggtttctaat | unsure at a 4986 aagggettae teaatgetaa gtttettata catacaatga 4987 429 DNA Glycine mas 4987 gagtatgaat gaetettetg | tcgtgcatgt acataaataa tactttaaga x ccacggagga cggcctccac | ttntgggtgt ctaatattat actattctaa tatgcttacc ataaggcata | aatatgtact cattagaatt cattagaatt acctcgaaag gaggatgggc | aacgacaaaa ggaattctat | 120 180 200 60 120 |

| gtggagtgta | gagggaataa | ctcccactga | gtggatccac | ggacgcccca | acagacagct | 240 |
|-------------------------------|---|------------|------------|------------|------------|-----|
| gtagggggg | gttaatatcc | attatttgga | aggtaacttg | acaggtgtga | gggcctatct | 300 |
| gtactgggag | atcgatctct | tccctaacct | ctctgcgggt | gccgtcgaaa | gcacgaacca | 360 |
| ccattgaact | cggctttatg | tgggaagttt | gaatggtatt | tttccaagtg | ttttatgcat | 420 |
| acgttaaac | | | | | | 429 |
| <213> | 4988 210 DNA Glycine max | × | | | | |
| <400> | 4988 | | | | | 60 |
| | | | | | tccctagtgg | 60 |
| atggcccctc | ctctcacctc | ttctgctttg | tcttccgctg | catctccatg | gtggaaaatc | 120 |
| accattaaag | gacctcattg | aagctcacag | atccagcctc | cataaaagcc | ccacaagcaa | 180 |
| gtttccatca | agtggtaatc | agagcacatg | · | | | 210 |
| <210> <211> <212> <213> <400> | 4989 402 DNA Glycine ma. 4989 | x | | | | |
| agcttcgtat | caaatgacac | agaaagcgtg | tttctgcttt | gcgcatggga | gatgttcggg | 60 |
| tgacaccttg | catgcacgat | tcttttcact | aaaatcgata | atattacaaa | actatgtatc | 120 |
| agtatcgata | atttagaaaa | ttatttacgt | gtaagggtga | tttttgccac | tccaaaatct | 180 |
| tagttgataa | aaaatactct | cattataggt | aaataatttt | caaaattacc | catattggta | 240 |
| aataatttta | caaaattatc | cattttagta | aaaaaaaaat | agtggtgcat | gcacctttga | 300 |
| aatgcaatag | aaattatgag | agtaaagaat | ttattagaaa | gcgtggtttt | atcaaacttt | 360 |
| aatgtactaa | cacagtacaa | tataactctc | ttcaaactta | tc | | 402 |
| <210><211><211><212><213> | 4990 294 DNA Glycine ma | x | | | | - |

| <223> <400> | unsure at a | ll n locati | ons. | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttgagctaga | gtgtgatgcc | tctggtgtag | gtgtgggagt | tgtgttatgg | tagggtggac | 60 |
| accctattac | ttaatttagt | gagaaacttc | atggtgccgc | tcttaactac | cccacatatg | 120 |
| ataaggagct | ttatgcctta | gttagagccc | tccaaacttg | ggaacattac | cttgtttcca | 180 |
| aggagtttgt | tattcatagc | gatcatgaat | cacttaagta | cattagagga | caatgcaang | 240 |
| tatacaagag | gcatgcaaaa | tgggtagagt | tccaagagcc | atttctatat | gtta | 294 |
| <210> <211> <212> <213> | 4991 311 DNA Glycine max | ς | | | | |
| <400> | 4991 | | | | | |
| agcttgtcct | taaattcagt | taagagcaac | gcatagctca | cattatctgc | ttcaactcct | 60 |
| aaacaatcca | aaatttttgg | cttctggttt | tatgtcaata | catcaaaatc | ttatgtttta | 120 |
| cttgtgtcat | catgtaatgc | ttcctctact | attgattcca | taaaacagaa | aaaaaacac | 180 |
| tataaaatga | aacctaatat | catcaacaac | ataaaccaaa | atttttggct | gctggttttg | 240 |
| tgcccattcc | ccacatttga | tcttcgatga | tccaatctac | aaatctcccc | cccgccccc | 300 |
| ataaaaatga | a | | | | | 311 |
| <210> <211> <212> <213> | 4992 355 DNA Glycine max | × | | | | |
| <223> <400> | unsure at 4992 | all n locat: | ions | | | |
| tataaactnt | atacaagaat | gaagctctga | taccacttgt | tagacaagtg | gcctcagata | 60 |
| tcttaagaag | ggggggttga | attaagatat | tccaaattat | ttcccctaat | tagaaatcta | 120 |
| tittcactttt | taaccaagtt | atgaattccc | ttaatgaaaa | tcttcttaaa | tattaattca | 180 |
| aatgaaacaa | tttgaatatg | aatataaagc | aataataaat | aaaggagatt | aagggaagag | 240 |
| aaaatgcaaa | ctcagtttta | tactggttcg | gccacaccct | tgtgcctacg | tccagtcctc | 300 |
| aagcaacccg | cttgagagtt | cactatcttg | taaatccttt | tacagttcta | acaca | 355 |

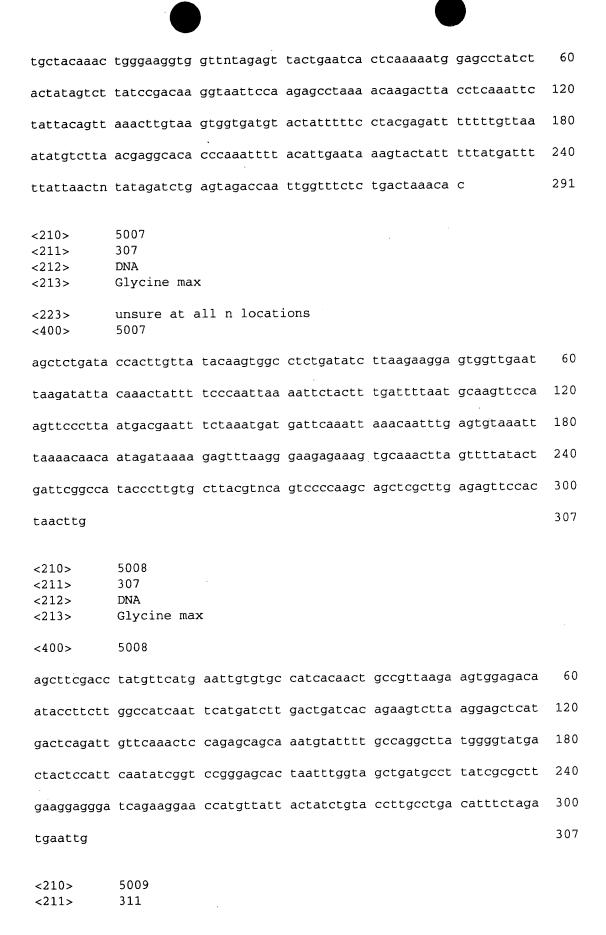
| <210> <211> <212> <213> | 4993 274 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| <400> | 4993 | | | | | |
| agcttctcgt | tcattgccat | aggtgtggca | agtggtttgc | aatcttgcat | gttgaacttc | 60 |
| tttaataagt | catccgcata | tttttcttgc | gagaaaaata | tttgtccaag | tctttgcttg | 120 |
| acttgcatct | tcacatatag | tgacggctca | cttggacttt | tgaggaatct | atgctcgacg | 180 |
| aaggatttgt | ctattttgtt | gtccatgctc | ggggagcttg | tttgagacca | taaaatgcat | 240 |
| ttttcaagcg | atatactttg | gcttcttctc | cctg | | | 274 |
| <210> <211> <212> <213> | 4994 361 DNA Glycine max | k all n locati | ions | | | |
| <223> <400> | 4994 | all n locat. | LONS | | | |
| tgtaatcaat | tacacacata | ctgtaatcga | ttaccagagg | agattttcag | aaaatattct | 60 |
| caacagtcac | atctttttat | ttggttcttg | aatggctatc | aaaggcctat | atatatgtga | 120 |
| cttgagacac | gaatttgcga | agactttttg | agaacaaaaa | ggtcttatcc | tcttaaagag | 180 |
| caaaattgtt | ttatcctctt | acaaattcct | tggccaaaac | acttgtgatt | caataaggaa | 240 |
| ttatttgagt | gctcaaattg | ttcaatctat | ctctntaaag | agagatttct | tcttctcttc | 300 |
| ttctttattt | tgaaaaggga | ttaagagacc | gagggtctct | tngtgtaaag | aaatctgaac | 360 |
| a | | | | | | 361 |
| <210> <211> <212> <213> | 4995 288 DNA Glycine ma | | · | | | |
| <223> <400> | unsure at 4995 | all n locat | TOUS | | | |
| agcttgtaat | agtatnttga | gcaataatat | ccagctatct | tttggatctc | cccctcttcc | 60 |
| cccttgattt | tectetaaat | cgataagtat | gatatccact | atgtctggct | aaattctttg | 120 |

| aaggcaccct | caaggggcct | tatttatctt | catttagaaa | atgcgaatat | gatttagaac | 180 |
|---|--|--|--|----------------------------------|--|--------------------------|
| ccaaatgttt | attttacttt | tgatttttt | tttgaaaacc | tgcggtttgt | aagcctgcaa | 240 |
| aggtgtgccc | ttgatatatg | ttttcaaaaa | caatggaagt | ccttatgg | | 288 |
| <210> <211> <212> <213> | 4996 220 DNA Glycine max | s | | | | |
| <400> | 4996 | | | | | |
| tggatctgtg | tttcagagga | atttgatgtt | ttcaacgtat | caagagcaat | tcttgacacg | 60 |
| attactgatt | cgactgatca | tggtagagag | ctagaaatag | ttcagagaag | actaaaagaa | 120 |
| aaattggcag | ataaaaaatt | tctcgtcgtt | ttggatgacg | tttggaacga | aagcaggcct | 180 |
| aaatgggaag | ctgtgcagaa | tgctcttgtt | tgtggagctc | | | 220 |
| <210> <211> <212> <213> | 4997 266 DNA Glycine max | ς. | | | | |
| <400> | 4997 | | | | | |
| cgattctcac | tcaattcttc | accaaatcac | ataccataaa | gcccaatctt | tctcttttc | 60 |
| | | | gegeegeaaa | 3 | | 00 |
| actcctcttt | | | | tcatcaaatg | | 120 |
| | cacttccacc | gatcaaaatc | cagaaaaact | tcatcaaatg | | |
| caaagaagag | cacttccacc | gatcaaaatc | cagaaaaact | tcatcaaatg | gcagagccat | 120 |
| caaagaagag | cacttccacc | gatcaaaatc teetecaeeg cetatteete | cagaaaaact | tcatcaaatg | gcagagccat cgtcacggcc | 120 180 |
| caaagaagag | cacttccacc aaagggatca acccacagca | gatcaaaatc tcctccaccg cctattcctc cgtcta | cagaaaaact | tcatcaaatg | gcagagccat cgtcacggcc | 120 180 240 |
| caaagaagag catccggagc tgttttcatc <210> <211> <212> | cacttccacc aaagggatca acccacagca cgatgatcaa 4998 361 DNA | gatcaaaatc tcctccaccg cctattcctc cgtcta | cagaaaaact | tcatcaaatg | gcagagccat cgtcacggcc | 120 180 240 |
| caaagaagag catccggagc tgttttcatc <210> <211> <212> <213> <400> | cacttccacc aaagggatca acccacagca cgatgatcaa 4998 361 DNA Glycine ma: | gatcaaaatc tcctccaccg cctattcctc cgtcta | cagaaaaact ctaccgctgc cttctttgtc | tcatcaaatg tggccatcgc atctccaaga | gcagagccat cgtcacggcc | 120 180 240 |
| caaagaagag catccggagc tgttttcatc <210> <211> <212> <213> <400> tgtagaatgg | cacttccacc aaagggatca acccacagca cgatgatcaa 4998 361 DNA Glycine ma: 4998 ccagacatga | gatcaaaatc tcctccaccg cctattcctc cgtcta x | cagaaaaact ctaccgctgc cttctttgtc | tcatcaaatg tggccatcgc atctccaaga | gcagagccat cgtcacggcc tcatcaacat | 120 180 240 266 |

| tagggetgag | gattcatttc | ctctatttta | aatcaaccca | atgtttccaa | aatatottot | 240 |
|----------------|------------------|--------------|------------|------------|------------|-----|
| | | • | | | | |
| | | | | ccggggaaat | | 300 |
| tcacccttca | ggtgtagaca | cattttccaa | aaattgggta | tgatcaatga | attttttt | 360 |
| c . | | | | | | 361 |
| | 1000 | | | | | |
| <210> <211> | 4999 358 | | | | | |
| <212> <213> | DNA Glycine max | ¢. | | | | |
| | | | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctatgagt | tggtttctgg | ccttagaatt | aattntgcta | agagccaatt | tggtgcaatt | 60 |
| _ | | | | tgaattgtgg | | 120 |
| | | • | | ctanaaggaa | | 180 |
| | | | | | | |
| gagcctctaa | tcacaaaatt | tgaggccaaa | ctgaacaaat | ggaaccagag | aagtctatct | 240 |
| atggctggca | gaattacttt | aattaatgct | gccttgacag | ctttgccttt | gttctatatg | 300 |
| tcctttttta | gggcccctac | agcaatcatt | aagaggctca | ctgctattca | aagacaat | 358 |
| | | | | | | |
| <210> <211> | 5000 329 | • | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | |
| <223> <400> | unsure at a 5000 | all n locat | ions | | | |
| nntggtattt | ataagtcccc | ttcaatcaag | tatttgttgt | ctctaaacgg | gcatatttcc | 60 |
| | | | | ttaaatgcac | | 120 |
| | | | | | | 180 |
| | | | | catagcagga | | |
| tttttgtatc | aaagcatgtc | tatgcagcat | aacttttctt | ttgatggcaa | ctgaggaatt | 240 |
| gcatagcttg | acttcattta | ttcttcataa | gattcgagag | atcctaagag | aatgtttctg | 300 |
| cacaatagat | ctcagacaca | ggatttaat | | | | 329 |
| | | | | | | |
| <210> <211> | 5001 448 | | | | | |
| | | | | | | |

| <212> <213> | DNA Glycine max | | | | | |
|-------------------------------|---|----------|------------|------------|----------------|-----|
| <223> <400> | unsure at all 5001 | n locati | ons | | | |
| agcttgtgat | aaggagactt ttc | cttcctt | gtttgtccat | taaggaggaa | gcaatacaag | 60 |
| ttcctgcaac | aaaataaaac ttc | aatcaga | aacaatatct | tgtttgcgga | acatatacaa | 120 |
| taaccttctt | ttactgaatg cac | aataaac | atttttaaga | ataaaaaata | ccaaccaaaa | 180 |
| acatttgatg | caccaaccaa ggc | acttgct | gcaacatcag | aagcaattcc | agcactacgg | 240 |
| aacacagaag | ttgaataata aac | tacagca | tttattccag | ccaactgctg | gaacaagaaa | 300 |
| agtgctgccc | caacactgac aac | tgaaaca | aggcatantt | taaggaagtg | ctatatacta | 360 |
| tttcataaaa | gaatacattt aat | caactaa | atagtaaact | aaaaaaagt | tgtcagtgaa | 420 |
| attaaaacat | gaacaatgat aat | attat | | | | 448 |
| <210> <211> <212> <213> | 5002 336 DNA Glycine max | | | | | |
| <400> | 5002 | | | | | |
| tgttcgaaga | tcctcgagac gtt | ataagag | gggccaatct | ttctgaaaag | actttcaaga | 60 |
| agtttttgaa | gatttctctt gat | gaaaact | ataacctgca | tccttttgag | ttcaaccatt | 120 |
| cccacttttg | caccatgggg ttt | gttacct | ggtgggagaa | atattattcg | acccgttcag | 180 |
| ttggagacac | tactatcatg ato | ctccagac | ttgagagtgg | ttttacacaa | ccaacggtcg | 240 |
| agaatatccg | ctcaaacctt caa | agctcgag | gtattaaatt | acttttgact | ttctaaattg | 300 |
| atatgtattt | ttgccttttc taa | atattett | attttc | | | 336 |
| <210> <211> <212> <213> <400> | 5003 238 DNA Glycine max 5003 | | | | ₂ • | |
| tattacggac | ctataaatct cag | gcttcctg | aactatatcg | attgaaatag | gtgctgacgt | 60 |
| tcttgacctg | caaatcgcat cat | ataacat | cggaaagcaa | tggtcgcgcg | ctgagcactc | 120 |

| ataacatgtg | gcttatcgct | ttctctagac | acgcactagg | acggaggact | gttacaaatt | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| acatgaaacc | atagatagtc | tgcagttctt | tattatatat | aatgtggacc | tcccccga | 238 |
| <210> <211> <212> <213> | 5004 341 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| catgaagctt | cgcgcttttt | attatgaagt | tgcaatctaa | cacaaagggt | gatgatgttt | 60 |
| ccttccaccg | caaaaaataa | cgaccagtta | ttttcaatct | actatcttta | cctctttcct | 120 |
| ttttcctttg | gtttttattc | actcaacttc | ggcactgttt | tcacctcaca | atcacaatgc | 180 |
| ctgcatgcat | aaatactatg | tgtctgaaaa | tcacaaccta | tctcggacgc | attgatgcgg | 240 |
| taattgaatt | tttttaatac | aaatcataaa | tgtcataatt | aatntgtgtt | tagaagtttt | 300 |
| tttactacta | ctactataan | tctaattaaa | aaaaaagttt | a | | 341 |
| <210> <211> <212> <213> | 5005 310 DNA Glycine ma: | x · | | | | |
| <400> | 5005 | | | | | |
| | | | | | ttttctgcaa | 60 |
| | | | | | ccagaaaatt | 120 |
| | | | | | ttaggaattg | 180 |
| | | | | | agtgaccaca | 240 |
| tttcttgagg | gatggaacca | tggaaagaat | ctaaagaaaa | attcacaaca | tttactttgg | 300 |
| acatgttacc | | | | | | 310 |
| <210> <211> <212> <213> | 5006 291 DNA Glycine ma | | | | | |
| <223> <400> | unsure at 5006 | all n locat | ions | | | |



| <212> <213> | DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 5009 | |
| tctcaataaa | tacttataga tgaagattat taanaagcaa attaatgaat caaatgtgat | 60 |
| tagaagtgta | tatatatgta taccatgttc tttgagccca gttgccaagt tgttagtctt | 120 |
| tctcccaagc | ctgttcatcc cggtaagaac tgaatttact ctacctgaaa aatcaagaca | 180 |
| ttaattcagt | atttcagtgt tgtgaatata aacatacctt tattgaatac ctgatgaaca | 240 |
| attatctttt | ctctcgtttt ctaattaaac aattgatcaa attattttct aataaacgat | 300 |
| atatatatct | С | 311 |
| <210> <211> <212> <213> | 5010 373 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5010 | |
| agcttgatat | tttccatata tctcaatgaa ttacaattgc tttatttata ctagtttcct | 60 |
| tgctaacggt | ttttgtcatt ttgtgccaag gaatattttt aggaaatcat tggatcatca | 120 |
| attatgacta | cactgtcccc ccatgaccaa caattcctca tctggcaata tcagcgcaaa | 180 |
| tctaggtcaa | cttcctctcc atgacttttc tttatacgta gtccctgatg taagagggcc | 240 |
| ttgtgatggt | cctctttgcc tttgctgcta tttgtacccg tttgttctgt gtttgaacct | 300 |
| ctntttgatg | atctttgttg cctctgctag ctatttcttc ctttgtatca cctgtactta | 360 |
| gatggaatgt | tac | 373 |
| <210> <211> <212> <213> <223> <400> | 5011 282 DNA Glycine max unsure at all n locations 5011 | |
| nttggtctta | aataaaaagg gttctccctt tttcccttat tttattcaag ctctgccaca | 60 |
| tgtccttatt | tgagtggagc aagaagggcc cactttetet ttttgactgt gacceatact | 120 |

| cagtcacaaa | agtgagaaaa | aatctgacct | ttgaaacgct | aaaatcċtgc | ctcggtttgc | 180 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| gtgccatttc | tctgattcca | gattctcgcg | tttctctgcg | tccgccgggg | ccagttttcg | 240 |
| aaagcaagca | atatatatat | cataacgctc | agaatgaaac | cc | | 282 |
| <210> <211> <212> <213> | 5012 326 DNA Glycine max | × . | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| gcttgatcaa | aacaattatc | taatcattcc | aatccactca | aatcatacaa | ttgctcattc | 60 |
| aaatcattct | caaacactca | tttcatgcaa | aacaatccac | tacatatcat | tttcaatcaa | 120 |
| ttcattggtc | aaacacgctt | ttggtacaaa | caaacaactc | aaagtgctga | aatttatata | 180 |
| attgaaattt | aaaaaaattg | aaatataaaa | tctgaaatta | aaatgactga | acatanatca | 240 |
| taaaataatt | gaaaataaac | taaaatgttc | gagatgcaca | aatttaaatg | tcctgctcct | 300 |
| gtggntgctc | ctatgcatgc | tcatta | | | | 326 |
| <210> <211> <212> <213> | 5013 302 DNA Glycine ma | | | | | |
| <223> <400> | unsure at 5013 | all n locat | ions | | | |
| tgctctanat | tacattgatg | tttgtattta | tgggaggagg | ttatatgcca | tttttgcttt | 60 |
| aagagtagtg | tcccactggt | aaaattaact | ttccaaatgt | ttgccttcgc | aggaatggcc | 120 |
| ccgaggaagc | ttgcctcaaa | gaggtccagg | aaggacaagg | cggccgaagg | aactagttcc | 180 |
| gctctggagt | acgacagtca | ccgcttcagg | agcgttgtac | accagcagcg | cttcgaagcc | 240 |
| atcaagggat | ggtcgtttct | ccgggagcga | cgcgtccagc | tcanggacga | cgagtatact | 300 |
| ga | | | | | • | 302 |
| <210> <211> <212> <213> | 5014 129 DNA Glycine ma | × | | | | |

| <400> | 5014 | | | | | |
|-------------------------------|-----------------------------------|--------------|------------|--------------|------------|-----|
| agctttagtg | actatatgac | gtagctccat | tggagcttgt | aggccttgga | tcttcttcat | 60 |
| caatggagtc | ctttgcttct | tgaattttaa | tggcagtgga | atggagaaaa | agaagagttg | 120 |
| agaggagac | | | | | | 129 |
| <210> <211> <212> <213> | 5015 399 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5015 | all n locat: | ions | | | |
| tgngactgca | tttgggcatt | tattttgact | ttcctatgct | gtctctacat | acacaaaata | 60 |
| gccccaccat | cccaattttg | caaaatcata | ttcattcatc | attggggcat | ttcaccgagc | 120 |
| acttggtgag | cgcatgtttg | aacataaatt | gcaagaggat | ggggacaatg | tggcatgccc | 180 |
| cattgcttca | gaatacaacc | taagcctaag | gccttctcat | ccaaatcctc | aacccaagaa | 240 |
| aacaaggatc | aaagcaaacc | aaaactgcct | cacaaatata | agcatgttct | cacaatttag | 300 |
| agtaccaaaa | gatgaagaaa | acacatcaat | gggaagcgaa | naacatcaag | gatggaatac | 360 |
| ttacttgttg | agtgaattga | acaccaaaat | gaagcaaac | | | 399 |
| <210> <211> <212> <213> <400> | 5016 354 DNA Glycine ma: | x | | | | |
| aggctagttt | tggacccttt | atcattgact | tccaaacttt | ataaatgaag | acattacgat | 60 |
| | | | | | tttaatgagg | 120 |
| ctttgatgga | aaggtacctt | attaaaaaga | gacttacaca | tgtgtcaaaa | aaaggtttgt | 180 |
| gaacactttt | gcgttaaaaa | gacgtctata | tggttgcatg | taacattgac | ctttacatgt | 240 |
| taccataaaa | taattctact | atttggataa | taatatatgt | atatataata | taattcatac | 300 |
| ttatcatcat | tctatttatc | tatctatatg | tcacctgtca | . tatttaaacc | : aatc | 354 |
| <210> | 5017 408 | | | | | |

| · | DNA Glycine max | |
|----------------------------------|--|-----|
| <400> | 5017 | |
| tctaaagaag | atgtaaaaat ctcatgtgcg agtaaaatag ttggaattat agacaaacca | 60 |
| aaatatatat | tagaggggta gttgatggga atatctaaga tctatgacta tatccaacct | 120 |
| cgttaggcta | caagaacacg agtttggagt caaatcaaaa tttcttgctg aggatagtta | 180 |
| tctagaagaa | ccaacaaggg tttttgtgtg tgttgtgtac tgttaactgt caactttatc | 240 |
| agttcgagtg | atgagtagca ttgcacaatg taatcgaaaa ttctcataaa caaaagccgt | 300 |
| agaagtgaat | atttatgata atacctaaca aaagaagcaa ttgctggcgg taacagcgag | 360 |
| attaattatc | gagcagttgg agcagtgctt tgacgcatca caacaact | 408 |
| <210> <211> <212> <213> | 5018 74 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5018 | |
| tagcttgtan | gccttggttc ttcttcatca atgtgagtcc tatgcttctt gaattttaat | 60 |
| cacaggggaa | tgga | 74 |
| <210> <211> <212> <213> | 5019 229 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5019 | |
| tgcttgagaa | gcttctatgg aggctggatc tttcagcttc aatgagatcc ttcaatggag | 60 |
| atgcaacaaa | agataaagga gaagaggtga gaggaggcgt catcccctag ggaataaacc | 120 |
| atggaaggag | gatcttcacc accaagagag tgccttcgat aagaagcttg aagaggaagc | 180 |
| ttcaatggag | gaaaagaatg agagagagat agacggnggg ggggggggg | 229 |
| <210> <211> <212> <213> | 5020 391 DNA Glycine max | |

| <223> <400> | unsure at all n locati 5020 | ons | | | |
|-------------------------------------|--|------------|------------|------------|-----|
| tttatattgc | taagagccaa tttggtgcaa | ttggccaatc | tgaggagtgg | tgtactcttg | 60 |
| cagcaaatat | cttgaattgt ggtcctctgc | agttcccatt | tatataccta | aggatgccta | 120 |
| tatgtggtaa | ccctaaaagg aaggtggtgt | gggagcctct | aatcaaaaaa | attgaggcca | 180 |
| aactgaacaa | atggaaccag agaagtctat | ctatggctgg | cagaattact | ttaattaatg | 240 |
| ctgccttgac | agctttgcct ttgttctata | tgtccttctt | tagggcccct | acaccatcat | 300 |
| taagaggctc | actgctattc aaagaccatt | tctttggggt | ggaaacttat | aaagagaaaa | 360 |
| gaagcttggg | tgcttggaat aaatgtggct | n | | | 391 |
| <210> <211> <212> <213> | 5021 362 DNA Glycine max | | | | |
| <223> <400> | unsure at all n locat: 5021 | ions | | | |
| cttggtattt | ataagtcctc ttcaatcaag | tatttgttgt | ctctaaacgg | gcatatttcc | 60 |
| tctcttaagt | ttgcatctga aaaatttggt | ccttggttca | ttaaatgcac | gcacttcctc | 120 |
| atgctaggaa | actactctnt gttgctagtg | ttttgaacac | catagcagga | aaccactatc | 180 |
| cttttgtatc | aaagcatgtc tatgcagcat | aacttttctt | ttgatggcaa | ctgaagaatt | 240 |
| gcatagctcg | acttcattta ttcttcataa | gattcgagag | atcctaagag | aatgtttctg | 300 |
| aaaatagatc | tcagacacag tatctaatga | aattttaaat | gttatctcta | atgttgatca | 360 |
| ta | | | | | 362 |
| <210> <211> <212> <213> <223> <400> | 5022 286 DNA Glycine max unsure at all n locat 5022 | ions | | | |
| tcttgatttc | ttccaccatt ganttttcaa | ccgctctaat | tcttgccttc | acacttagca | 60 |
| aatctgaaac | cccatctggt atcaaagtgc | ttttgttatc | tcttgaactt | tgatagccat | 120 |

| tttcatggag | acaagtttca | attactgcat | cctggacaaa | caaacattca | tgataaacaa | 180 |
|----------------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-----|
| ggataagtag | aattcatatt | tcctgcatat | gctcattgcc | tcatttaata | agacagactt | 240 |
| aagaacaaaa | ctgaagtaca | cgataacaag | tcaatggaat | attacc | | 286 |
| <210> <211> <212> <213> | 5023 445 DNA Glycine max | s. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctntcaca | atatctagac | aattcaattc | catttgtcat | gaaactacct | taaacaaaga | 60 |
| aaaataaagt | ggaggcagaa | tctttgcaca | agattcattc | aaattccaca | gagtttttcc | 120 |
| taccctcata | cctcagcaaa | atcctcttct | tttcgatttg | ttaaccattg | gatctccttg | 180 |
| aaaattttac | tgggggttcc | taatgcagaa | atctaaattt | tgaccgttgg | gatctgctat | 240 |
| aaaatgtcta | gaacacgaga | tgtactacct | ttcccgtgac | tagcactgcc | caaccatttt | 300 |
| tctacataat | ttggcagttn | tgctacacaa | tttaacagct | gtctctgcat | aatctggtag | 360 |
| atntcgaatt | ctggcttgca | tgtatccaat | ttcactcana | ttggatccta | caagtcctaa | 420 |
| atcatgtata | aatcatgttc | aaacc | | | | 445 |
| <210> <211> <212> <213> | 5024 381 DNA Glycine ma | x | | | | |
| <400> | 5024 | | | | | |
| cttatcatcc | tttttagtga | ctcatgatag | tcttaagttt | acttcaattg | ttgttcttta | 60 |
| cagaaatttt | catttctgaa | tacacttaag | caaactcatc | : agtaggcata | aacttagaag | 120 |
| gctcatgatt | cctgctcaga | . aggtttttca | taattaaaac | accaataatt | ttggactcaa | 180 |
| cagttcttta | attttgacac | actcataatg | atgctcagaa | aggtttagag | g agcaactacc | 240 |
| agagttgaga | acttggaata | ațtcttgaag | g cccattaaaa | tgatggagtg | g tgcttccctc | 300 |
| taagtactta | attctaggaa | aaatgatgaa | a caacaaggco | ttacatagaa | a gattcattag | 360 |
| atgctacatg | g aagagcatca | ı t | | | • | 381 |

| <212> | 5025 379 DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 5025 | |
| agctntttaa | caaacactgg ccgataatat ttctatactg ttaagaaagt tttgttgttg | 60 |
| gtgtcgccta | taaaattttc aatgttggtt ggctaagttt tttcgttcga gctcaaatga | 120 |
| atttgtattt | cggccgacac cggcatgttt tcatttgctt ggcaaggaaa acattngccc | 180 |
| acctcagaaa | aaacatgatt caccgatacg tatcgcaaaa gattctagcc gacgtcggcc | 240 |
| aagagagatg | accgatcgag ctataaaaaa gaagcatcac cggatgacgc cgatcgaaca | 300 |
| tttcctaata | gacatcagcc aaatattatt cagggattga atagaaaata caatatctga | 360 |
| aatcggtagt | taaaatgct | 379 |
| <210> <211> <212> <213> <223> <400> | 5026 371 DNA Glycine max unsure at all n locations 5026 | |
| | ttntagtaat gacccactaa cctagaatta aaataactta atgccattaa | 60 |
| | taaaaaaaaa cttaatggct gagtgtaact gaaattgtgg caaccaaaag | 120 |
| | agccaacaag tcagccacca tttggtctcc caaaaggctg atgcctatgt | 180 |
| | gecettatta caacttgaac taaacetaac taaageeett ttagtttatt | 240 |
| | atatttttgg tcaaccaact ttacaaggat tgagccatta tttagacaaa | 300 |
| | taaaattgag acaaagtggt gccatttagt cctcctccat ttgggccatg | 360 |
| atacaactca | | 371 |
| | | |
| <210><211><211><212><213> | 5027 382 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5027 | |

| | _ | | | | | |
|----------------|-------------|--------------|--------------|--------------|------------|-----|
| agctngatgc | atacataaat | caacaaaaag | aatgttagtg | aattcattca | ataataatat | 60 |
| tacattatag | aaattaataa | ataataagtt | aatataccaa | tttatcattc | aattattatt | 120 |
| ataatatcat | attttatata | aaattgagca | taatatatat | taaatatttc | aaaaaaaatg | 180 |
| aaatagcatg | tgaactgcag | tgatttttta | tgatttgact | caaacaaaat | agtttttcgt | 240 |
| aataataatt | caaaaaaata | taaatataat | tcttaaatta | attttactat | ctaataaatt | 300 |
| atattatcat | ataaatatta | atctggcatt | aaattttgca | tatgaagtta | gatgcataaa | 360 |
| ttaaatcaac | anaaaaagag | ag | | | | 382 |
| | | | | | | |
| <210> | 5028 | | | | | |
| <211> | 411 | | | • | | |
| <212> | DNA | | • | | | |
| <213> | Glycine max | | | | | |
| <223> | unsure at a | ill n locat | ions | | | |
| <223> <400> | 5028 | iii ii iocac | 10115 | | | |
| <400> | 3020 | | | | | |
| tggagtcact | ccaacacttc | atgtacttag | ctcttgtaac | gccctttgtt | acaataacaa | 60 |
| tccgtaataa | aaatatactt | tataacgttc | ataaaataaa | aatgtttatt | ttaatggtcc | 120 |
| aaaatacttc | aaatattata | ataaatgagt | ccttacaaaa | ataaacaact | ttattctcaa | 180 |
| atatgaacag | ctacaaagtt | taacgaacaa | tgaactgagt | cttcaattct | cttttgtctt | 240 |
| aaaagcttct | tcctcgaact | cttaaaacaa | cacttttaat | gagataataa | tctcaatgaa | 300 |
| taaaataagt | tctgaaagga | ttcacaaata | gtgttgttct | cagacgacgc | ggtaatcaga | 360 |
| aaaatccaat | aatgatatcc | ataanattaa | aatttaaata | atatatacat | a | 411 |
| | | | | | | |
| <210> | 5029 | | | | | |
| <211> | 368 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | × | | | | |
| <400> | 5029 | | | | | |
| • | | | | | | 60 |
| tagcttgcca | cccagctcgt | ccaggcgagc | : tatgttgctt | cctccagaat | gttgttctgg | 60 |
| tggaacttct | tggaaggccc | aaatgggcct | ggttgctatt | tgcaccccca | tgtttactaa | 120 |
| atacaccccc | tgcctttttt | gctgattctt | tttccgtaac | gttacggatc | tttacgaatc | 180 |
| acgtaacgat | acttgtttcc | tttccgtaat | gtcacgaaac | : ctttttacgg | attacgtaat | 240 |
| tatccctttt | ttggctttcg | gaatgttaca | aaacatcacg | gatcgtgcaa | caatgcttcc | 300 |

| ttttgacttt | cggcatgtca | cggaacttca | cagattgtgc | aacactgctt | tcttttgact | 360 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tctggcat | | | | | | 368 |
| <210> <211> <212> <213> | 5030 285 DNA Glycine max | . | | | | |
| <400> | 5030 | | | | | |
| tggacataaa | ccccgcctac | agttgcctgc | tatgtcggcc | ttggatccat | tctgttgggg | 60 |
| tggtcctgtc | aatgttgcac | caaaaattaa | agtttatggt | ggaaggacaa | ctggttatag | 120 |
| tgccatggga | agaagatata | ctaatgagtt | gtccatcctc | ttcaccctat | gtggaagctg | 180 |
| tggaagagtc | attggaaaca | tcttttcaag | cactagaaat | tgtgaacaat | gcttatgtgg | 240 |
| aggctcctct | ggtgcaaccg | cgtctatctg | gtgatggcac | agaat | | 285 |
| <210> <211> <212> <213> | 5031 397 DNA Glycine ma | x | | | | |
| <400> | 5031 | | | | | |
| agcttatggt | agtgaactct | ttcactgtgg | tctcgacata | caagctttta | gaaggactac | 60 |
| aacaatctga | acaagagggt | cagcagagtg | caaacttgtt | ttccaaattc | tggtgtgcaa | 120 |
| aagttccaac | gaaagtactt | gttttctctt | ggaaattact | ccaagatagg | cttccaacag | 180 |
| cacaagcgct | ctagaggagg | ggagttatta | ttcaagacta | caatttttca | tgcaaactgt | 240 |
| gtggccttga | ggtggaaacc | aacaatcatt | tgttcttact | atgtccggta | attaacagat | 300 |
| tgtgggaaag | agttatggca | tgggtgggaa | tggatttaca | aattccaaat | catatcaacc | 360 |
| agctgttcgg | gatgattaga | gagaatctat | tgggtgc | | | 397 |
| <210> <211> <212> <213> | 5032 346 DNA Glycine ma | ıx | | | | |
| <223> <400> | unsure at 5032 | all n locat | ions | | | |

| tggatttcct | tttagtaggg | aatctatcct | tcctaagatg | gagccaaacc | cagtcaccct | 60 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tattaagaac | tagctctttt | attcctttat | tgcctttagt | tgaatacacc | tttgtttggt | 120 |
| tctctatttg | gttcttaacc | ctctcatgca | acttctttac | aaactctgac | ctagattccc | 180 |
| cttctttatg | tataaaagaa | gtgtctagtg | ggaggggaat | gtgtctagtg | ggaggggaat | 240 |
| gaggtctaac | tgtgacatcc | tggaaatatt | tacctggaat | tttgtaagcg | atatattnta | 300 |
| aataaatata | tatatgtatt | attcagtgga | tatatatata | tatact | | 346 |
| <210> <211> <212> <213> | 5033 377 DNA Glycine max | ĸ | | | · | |
| <223> <400> | unsure at a | all n locat: | ions | | , | |
| agctntgcat | gtctagggtt | tctagagaga | gaaaggtcca | agttctagag | agttttgaga | 60 |
| gattttgttg | tgtgaagatc | tgcagagacc | agagcttgaa | acaagagccg | gtttgagagc | 120 |
| ttgagatgag | tttgtgagtg | attgcgagat | cctagaggtg | aaggagacat | cttcaccact | 180 |
| tgtatatttg | caatctttca | tcttgttctt | ctctttgttc | ttaagaaggc | tttctggtat | 240 |
| ggaaagctaa | atcctttgtg | gatcttccct | gtaggtacct | gatgtaaata | tatttctatc | 300 |
| tatttaatga | tgttntgtgt | gttctctgtg | ctatctgctt | ttcattccag | tatgccttta | 360 |
| ccttgatcac | gtagatg | | | | | 377 |
| <210> <211> <212> <213> | 5034 246 DNA Glycine ma | × | | | ¢ | |
| <223> <400> | unsure at 5034 | all n locat | ions | | | |
| tgtagaatgg | ctagacatga | tacatgtcag | ggtttggttt | ggttcaagga | taaaagggat | 60 |
| gccccacact | atttccatga | cacaaatgca | aaaatgatga | tttggaaact | tttatgcaaa | 120 |
| actggtcatg | catgcaccta | tgtggacact | caagtgtcaa | acttttatgg | tcatgtgatg | 180 |
| ctagggctca | ggattcattt | cctccattnt | aaatcaaccc | aatgtttcca | aaatatgttc | 240 |
| ttttat | | | | | • | 246 |

| <210><211><212><213> | 5035 293 DNA Glycine max | ζ | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|------------|
| <400> | 5035 | | | | | |
| taaaacaagc | ttcccgtcag | tggtacctta | agtttcatgg | gataatttct | tcatttggtt | 60 |
| ttgatgaaaa | ccccatggat | caatgcatat | accacaaggt | tagtgggagt | aaaatatgct | 120 |
| ttcttggttt | atatgtagat | gatattttac | ttgcaaccca | cgattcgggt | ttgctacatg | 180 |
| aggtgaaaca | atttctcttc | taaaattttg | acatgaaaga | tatgggtgat | gcatcttatg | 240 |
| tcatcggcat | taagattcat | agagatagat | ctcgaggtat | tttaggtcta | tca | 293 |
| <210> <211> <212> <213> | 5036 345 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a 5036 | all n locati | ions | | | |
| tgactaggcg | agttgattnt | agccttagtt | tcactttagt | tattagtcaa | ttaaattaag | 60 |
| aatgagaaat | cccaaagaca | aaacgtccga | ttgattnttc | gctttatttt | actaaaaggt | 120 |
| attttttgat | tattatatta | ttattttacc | tctttttta | tttccaacgt | ggttacgaca | 180 |
| cgaccgaacg | gtcggaattc | attttaaccg | aaattaacgg | atgatgcaat | tcanacgatc | 240 |
| ggtggaaatt | tattntattn | ttagattang | cgagaaatga | cttatataaa | tggcttaagc | 300 |
| acgtncaaag | ggggtataaa | aagtgaatgn | aaacgagaat | aaaaa | | 345 |
| <210> <211> <212> <213> | 5037 321 DNA Glycine max | K | | | | |
| <400> | 5037 | | | | | C 0 |
| | | | | ttggcaaaaa | | 60 |
| | | | | atacaaaata | | 120 |
| | | | | gatagagaat | | 180 |
| cattaagcaa | ggggaaagta | gaattattat | gaaggattaa | aatattaata | gaatttttat | 240 |

.

| gatttcaaat | attaatagtt | tatttataga | tgtaatttac | tacaaaatat | tatacttttc | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttttattcac | gtaatacaat | t | | | | 321 |
| <210> <211> <212> <213> | 5038 370 DNA Glycine max | c | · | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| ctgcaagaaa | tagtggctaa | tatgaggaca | atccaattgt | atgaggggac | ccaacatcta | 60 |
| gaggcctaca | tgcgtgggtt | gctagtcaca | tgtattgctt | gcttggagtg | agaatagaag | 120 |
| acaattattg | gctaaggcat | ttaataataa | taataataat | aataataata | ataataataa | 180 |
| taataataat | aataataata | ataaagtgct | tgtagctagt | tttgagactt | ggacctcaag | 240 |
| cttaattatg | cctcacttaa | tcactaaggc | attntagtta | tgtttacaat | gttgagattt | 300 |
| tatgtttctt | ttattttcta | ccaagtacac | aagaagtgat | ttgtataaat | caattgtgaa | 360 |
| gtgaatggaa | | | | | | 370 |
| <210> <211> <212> <213> | 5039 357 DNA Glycine max | · · | | | | |
| <400> | 5039 | | | | | |
| agcttgattg | cctattcatc | aaagggagaa | ttctcctgag | ataatatatg | agagatgcag | 60 |
| caacaacctc | agatitcatt | cctttcactt | caatggctat | aatcagtcgt | ttatataggg | 120 |
| agaggcttaa | catagacaca | tcataaaacc | accaatcatg | gagttgagat | ggtttctcag | 180 |
| aagaaattcc | attccacaat | gcactgttgt | ctgcttgatt | ttgcttgcaa | ttgcttccaa | 240 |
| ccacaggcca | gtggaataag | gttggatctg | aacaagcctt | tatagccaag | gaatcaatgc | 300 |
| atcttgaaac | tatatggaga | tcttttgtca | agggctgcac | ttccttcaca | tgtttaa | 357 |
| <210><211><212><213> | 5040 355 DNA Glycine max | ς. | | | | |

| <223> <400> | unsure at a 5040 | all n locati | ions | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tatagatcag | ctaatccaag | agaaaaatga | aaaatcgcaa | aattgttagg | tgtacctaac | 60 |
| aatgccctca | caaggcttgg | cgtcatgtcc | catcctaaag | gaatcaacaa | cacactagct | 120 |
| aacctacttt | aaaatttatc | aaaaactact | aataagatat | aatataatta | gtaaataatn | 180 |
| tagtcactta | aacatgtgat | cataaataga | atctctagtt | cgtatatttg | gagaaacatt | 240 |
| agtttgaaaa | gatcaatctt | ttcaataaat | ctcactaggt | aaaaaaaatt | aatcaatacc | 300 |
| ttttgaccaa | aaaatattng | attcctaccc | atttttttaa | taaaaaaatt | ccaaa | 355 |
| <210> <211> <212> <213> | 5041 396 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a 5041 | all n locat: | ions | · | | |
| ttattatagt | ccttctatgg | gacctatctc | gatgggtcga | ttcacaaccc | cacaaacatt | 60 |
| taacttggta | agcgtaagtg | cttaaatgta | ttgatagaat | tgaacctatg | aaattatctt | 120 |
| ggttagatgg | tacaatttcc | taccaagaac | ttatcatgta | ggagtaagtg | cttaagtact | 180 |
| gtcataagct | atgtctcaaa | gacttacctc | ggtcaaataa | tccatagtac | aacaagtact | 240 |
| tatctagata | ggcataagtg | cttaagcttt | cttgatcaat | tgtccttagt | aacatgagaa | 300 |
| ttactttgat | gagtttgaca | ccctacccca | acatgcatat | aaatgaaaaa | anaacataaa | 360 |
| tgcggaatct | aattaaagtc | aatttcattc | aataan | | | 396 |
| <210> <211> <212> <213> | 5042 396 DNA Glycine max | x | | | | |
| <400> | 5042 | | | | | |
| tgttggttac | agtgacaaca | attgggctgg | agatgaagat | gattggaaaa | gtaccagtgg | 60 |
| atttgtgttt | ttcataggaa | acacaacctt | cacttggatg | tcaaaaaagt | agccgatatt | 120 |
| cactcttttg | actcgtgagg | cagaatacgt | agcagctact | tcatgtgttt | gtcatgcaat | 180 |
| ctagcataag | aatttattaa | aagagttggg | catgtcacaa | gaagagttga | ccaagatctt | 240 |

| tgtggataat | aagttagtca | ttgctctagc | aaggaatcca | gtgttctatg | atcgaagcaa | 300 |
|-------------------------|-----------------------------------|---------------------------------------|------------|------------|------------|-----|
| gcatattgat | accccttacc | actacataag | ggagtgcata | gcaagaaagg | atgtacatgc | 360 |
| agaatatgtg | aagtctcaag | accaagaagc | tgacat | | | 396 |
| <210> <211> <212> <213> | 5043 390 DNA Glycine max | κ | | | | |
| <400> | 5043 | | | | | |
| agcttgtaaa | tatttattgg | tataatttgc | ctgttccatt | aggctcttaa | tgtctttaga | 60 |
| gattacttcc | ttgttgacat | cttttgtctt | gaatggaatt | gccatgatag | gtttattgtt | 120 |
| actgtctttg | acatttggta | gttgatattg | tgttgcggga | ggtaattccg | attagattaa | 180 |
| ctcaccatcc | ttcattcgcc | aatttttat | gacatttgtt | gttggatcac | ctatgatatc | 240 |
| ttgtttccaa | gggtaatcta | tatcctttct | aatggtataa | gcatgaaacc | aatcaaagaa | 300 |
| aaggacatta | attttgactc | tttcgacaaa | ttcgtacaac | ttgtcttgga | tttgctatct | 360 |
| gtttgtaccc | tagaaatgtc | ggaaaaatca | | | | 390 |
| <210> <211> <212> <213> | 5044 323 DNA Glycine max | « | | | | |
| <223> <400> | unsure at a 5044 | all n locat: | ions | | | |
| tcaaccctac | gtcctgctct | tacatctcta | tatatagaga | atgcttcttc | cattatctta | 60 |
| gcttgngcca | gcaattctgc | tctctgtatt | ccagaaggat | gagtagagaa | ataatccccg | 120 |
| . aaggtagaat | aaccagcaaa | ttttcctaac | tcctcataca | ctttatgtgc | cacccgggga | 180 |
| tcataaccgg | ctaatgcaat | tatgtactaa | gttatgtcac | gcctattttg | aacactcagt | 240 |
| ccatctattt | atcacttgct | catttgctaa | attcattcgc | gtattaactc | atgtagatgt | 300 |
| taattgtgaa | gcatcgggat | aca | | | | 323 |
| <210> <211> <212> <213> | 5045 391 DNA Glycine max | · · · · · · · · · · · · · · · · · · · | | | | |

| <223> <400> | unsure at a | all n locati | ons | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agcttntggc | aaaggaagaa | gaagttcaag | aatatgttca | aagagattca | aaggttgtaa | 60 |
| aagaatatat | taaaaagtac | ctgaaatgca | agtcaaggtc | ttgcttttat | agactcttca | 120 |
| tgtctggtca | agaaaaccat | tgaagagtta | taacctttag | aaaaacctga | aaaccattgg | 180 |
| aagagttaaa | tgttttgatt | tttatttaaa | acttgtcgct | ggtaatcgat | taccaaaacc | 240 |
| atgtaatcga | ttacacaaag | ctttttatga | aaggatatga | ctcttcacaa | ttgattttga | 300 |
| atttcaacat | ttagatacat | tggtaatcga | tttccaatat | cttgtaatcg | attacaccat | 360 |
| tttaaaatca | attggaatgg | tgcaaattca | g | | | 391 |
| <210> <211> <212> <213> | 5046 333 DNA Glycine max | ς | | | | |
| | ggatcttctt | catcaatgga | ttcctttgct | tcttggaaaa | tgaatggcaa | 60 |
| | | | | tcaaggagaa | | 120 |
| | | | | gggggaagaa | | 180 |
| | | | | aatgagcttt | | 240 |
| | | | | | | 300 |
| | | | | acatgacctc | tatttatage | |
| ctaagtgtca | cacaaaaatg | gagggaaatt | cca | | | 333 |
| <210> <211> <212> <213> | 5047 376 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a 5047 | all n locati | ions | 4.4 | | |
| agcttcatgg | atntccttct | acaattatat | cttataagga | tgcaattttt | ctcagcagtt | 60 |
| tttggaggga | gatgntaaat | tggctagaac | tagtcctaag | catagcactt | cttatcatcc | 120 |
| ccaaacggat | ggtcaaaccg | aagttgctaa | tcggtgctta | aagacctatc | ttaggtgctt | 180 |
| tgctggccct | aagcccaaga | cttggtttga | atggttgcat | tgggctgagt | tctggtttaa | 240 |

| cartaactac | aatatottto | ctoquatoac | accttttaaa | cctttatatg | gacgagatcc | 300 |
|--|--|--|--|--|--------------------------|-------------------|
| | | • | | | | |
| tccattgttg | attaagagct | gcaccattcc | atcaaagttg | gatgatgtaa | atcagttggc | 360 |
| ccaacaacga | gatgat | | | | | 376 |
| <210> <211> <212> <213> | 5048 321 DNA Glycine max | · · | | | · | |
| <400> | 5048 | | | | | |
| agctcgctta | gtagatgttt | atcggcaagg | aaaatattca | ctttatttat | gaagttgtac | 60 |
| aaattcataa | tatttaattt | attgtattat | gtaacactgt | atattatttc | atgattgtac | 120 |
| atttttagct | tgtggaattt | tgtttctgtg | tcaagtttta | gatgtttcat | tcttttgtta | 180 |
| cgtgttgtga | atggaatgca | tttaaagtat | tctcttttat | ttggtaaaat | ctctcaaaag | 240 |
| actataaaaa | ttggtcataa | ctaagagagt | atttgtgcta | ttacaagatt | caagaaggga | 300 |
| aaaaaattat | ttcaaatttc | a | | | | 321 |
| | | | | | | |
| <210> <211> <212> <213> | 5049 286 DNA Glycine max | ĸ | | | | |
| <211> <212> | 286 DNA | ς. | | | | |
| <211> <212> <213> <400> | 286 DNA Glycine max 5049 | | atctcttaac | caatctgcct | cgctaagcga | 60 |
| <211> <212> <213> <400> ctacagttgg | 286 DNA Glycine max 5049 atgcctcgct | aagtggatgc | | caatctgcct tgagttggat | | 60 |
| <211> <212> <213> <400> ctacagttgg gtcattaaca | 286 DNA Glycine max 5049 atgcctcgct acttttacct | aagtggatgc tctcttcttt | ggcgtgaaat | | tcaacattaa | |
| <211> <212> <213> <400> ctacagttgg gtcattaaca ggcacaaaaa | 286 DNA Glycine max 5049 atgcctcgct acttttacct ttgagtttct | aagtggatgc tctcttcttt actctataaa | ggcgtgaaat | tgagttggat | tcaacattaa tgtaccatct | 120 |
| <211> <212> <213> <400> ctacagttgg gtcattaaca ggcacaaaaa ctacaaaaag | 286 DNA Glycine max 5049 atgcctcgct acttttacct ttgagtttct | aagtggatgc tctcttcttt actctataaa aggaggcata | ggcgtgaaat atcacacaat ttgctatttt | tgagttggat aaagaaaata cttgcaaatt | tcaacattaa tgtaccatct | 120 180 |
| <211> <212> <213> <400> ctacagttgg gtcattaaca ggcacaaaaa ctacaaaaag | 286 DNA Glycine max 5049 atgcctcgct acttttacct ttgagtttct aaccataaat | aagtggatgc tctcttcttt actctataaa aggaggcata aatcctaccc | ggcgtgaaat atcacacaat ttgctatttt | tgagttggat aaagaaaata cttgcaaatt | tcaacattaa tgtaccatct | 120 180 240 |
| <211> <212> <212> <213> <400> ctacagttgg gtcattaaca ggcacaaaaa ctacaaaaag aactaactca <210> <211> <211> <212> | 286 DNA Glycine max 5049 atgcctcgct acttttacct ttgagtttct aaccataaat tggatgatgc 5050 365 DNA | aagtggatgc tctcttcttt actctataaa aggaggcata aatcctaccc | ggcgtgaaat atcacacaat ttgctatttt | tgagttggat aaagaaaata cttgcaaatt | tcaacattaa tgtaccatct | 120 180 240 |

| gctcaccttc | ttgaaatgag | aagctagagc | atagctacac | acacctctct | aatagctaag | 120 |
|-------------------------|-----------------------------------|--------------------------|------------|------------|------------|-----|
| ctcacctcct | tgagataaga | agctagagct | tagctacaca | ccccttataa | tagctaagct | 180 |
| cacccccatg | ccaaaataca | tgaaaatata | aaaaaaagt | ccctactata | aagactactc | 240 |
| aaaatgccct | gaaatacaag | gctaaaaccc | tatactacta | gaatggccaa | aatacaaggc | 300 |
| ccaaaaaaaa | ggaaaaacct | attctaattg | ggctcataaa | tctaccttga | ggttcatgag | 360 |
| aacgc | | | | | | 365 |
| <210> <211> <212> <213> | 5051 341 DNA Glycine max | K all n locat: | ions | | | |
| <400> | 5051 | | | | | |
| aacatccaag | caaaacaacg | ttctaacagc | acaagctatc | acagccaagc | aaaacagagc | 60 |
| aaaggccgaa | aactctgctc | aacacatcaa | ccaaaatcac | agcttttctc | acgtaaagac | 120 |
| cacagtaaca | attccttcga | tccaattcgt | taaccggtgg | atcgactcca | aaattttact | 180 |
| ggaagtctat | agtgtataag | cctgcatttt | gaccgttggg | atatactagc | aaacatccag | 240 |
| aactcattct | gcactagact | tttcacagcc | aaccacacac | aagcattntt | ctgcacttgt | 300 |
| gcaaaattct | gctgcacaat | ttcacagcaa | aaactctgca | t | | 341 |
| <210> <211> <212> <213> | 5052 383 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5052 | all n locat | ions | | | |
| gaagaagaag | aagttcagag | agattcaagg | cttgtaaagg | attgtaagag | attgattgaa | 60 |
| aagtattcaa | gattgaatga | atgtaaaagt | gtaaaacaaa | gccttgcttt | tatagactcc | 120 |
| tcatgtctgg | tcaagaatac | cttttagaag | agttataact | tttagaaaaa | cttaaaacca | 180 |
| atttgaaaaa | gtcaaaaacc | ttttaaagag | ttacatcttt | tgatttattc | agaaacagtc | 240 |
| actggtaatc | gattaccaaa | tcagtctaat | tgattacaca | aggcttttta | tgtgaaagga | 300 |
| tgtgattctt | cacattngaa | tntgaatttc | aacgttcaaa | ggcactttga | atcaattacc | 360 |

| aaaacactgt | aatcgattac | aac | | , | | 383 |
|---|--|---|--------------------------|--------------------------|------------|-------------------|
| <210> <211> <212> <213> | 5053 325 DNA Glycine max | | | | | |
| <400> | 5053 | | | | | |
| agcttctatg | gatgttggat | ctttgagctt | taatggggtc | cttcaatggt | gtattttagc | 60 |
| catggagttg | tagtggaaga | taaaaggaga | agaagtgaga | ataggcacca | tccactaggg | 120 |
| aataagccat | ggaagaagaa | acttcaccac | caagagagtg | tcttggataa | gaagcttaaa | 180 |
| gaggaagctt | caatggagga | agagaatgag | agagaaagag | aaagagaaaa | agtggcatgg | 240 |
| gaatgaatga | aaaacaggga | gagaagatga | actttgaagt | tttctctcaa | gattctcatt | 300 |
| catcaaagtt | gccacaagtg | ttaca | | | | 325 |
| <210> <211> <212> <213> | 5054 267 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tgaggagaag | ctctgactcc | atttgaccct | ataaataaaa | acatatgggt | gagtctttnt | 60 |
| ggtttgccaa | tcaaaataca | aaaaaaaac | | | | |
| aaccactacg | | | taaacataag | ttaaaacaca | ctagactagc | 120 |
| | atgtggttat | | | ttaaaacaca ttctaaggtg | | 120 180 |
| actaattcaa | | ctatcgaatc | tcatatgcat | ttctaaggtg | | 180 |
| | | ctatcgaatc | tcatatgcat | ttctaaggtg | tcaccttttc | 180 |
| cttagtagtc <210> <211> <212> | catatatgtt | ctatcgaatc tatatatgac ttagttt | tcatatgcat | ttctaaggtg | tcaccttttc | 180 240 |
| cttagtagtc <210> <211> <212> | catatatgtt ttacgaaact 5055 349 DNA Glycine max | ctatcgaatc tatatatgac ttagttt | tcatatgcat attggtaagc | ttctaaggtg | tcaccttttc | 180 240 |
| <pre>cttagtagtc <210> <211> <212> <213> <223> <400></pre> | catatatgtt ttacgaaact 5055 349 DNA Glycine max unsure at a | ctatcgaatc tatatatgac ttagttt x all n locat: | tcatatgcat attggtaagc | ttctaaggtg | tcaccttttc | 180 240 267 |

| gatggtcgtt | tcgacgggag | cgacgcgtcc | aactcatgga | cgacgagtat | actgatttcc | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aggaggagat | agggcaccgg | cggtggacat | cactggttac | ccccatggcc | aagttcgatc | 240 |
| cagaaatagt | ccttgagttt | tatgccaatg | cttggccaac | agaggagggc | gtgcgtgaca | 300 |
| tgaggtcctg | ggtaaggggt | cagtggatcc | cgtttgatgc | cgaccctat | | 349 |
| <210><211><212><213> | 5056 314 DNA Glycine max | ĸ | | | | |
| <400> | 5056 | | | | | |
| tcaacctaga | ggagacgaac | cattccaagt | gttggagaag | atcaacgaca | atgcctacaa | 60 |
| gattgacttg | cctagtgagt | ataatgtaag | tgccactttc | aatgtgtctg | atctatctct | 120 |
| ttttgatgca | gatggaggag | ccttggattt | gaggacaaat | ccttttcaag | gagggagtga | 180 |
| tgaggacata | accaatggca | aggaccatga | agcacttgaa | ggtcccatga | ccagaggcag | 240 |
| acttaaacaa | gcccaacaca | ttatagagaa | caggctggtc | atttggatag | ctgtcattga | 300 |
| tgatgattga | aggc | | | | | 314 |
| <210> <211> <212> <213> | 5057 279 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | , | |
| agcttgaatg | tcttctgatg | acgaaagtaa | atactctgta | aaatttcaaa | ataatcataa | 60 |
| tcgaacgacc | aacatcatcc | tgataccatc | gaccttcttc | gccctggttg | acgaaaggta | 120 |
| cggataacca | taaagtattc | cccgcatgtc | atcgaactcg | ttgtctctgg | atgacaaaag | 180 |
| gtgcagaaga | cgacgttagt | ctctgcgtat | caaccggctc | gtttgcctct | gngtgacaaa | 240 |
| ggtgcggata | accataaggt | accccccct | gccacttga | | | 279 |
| <210><211><212><213> | 5058 120 DNA Glycine max | × | | | | |

| <400> | 5058 | |
|---|--|-------------------|
| tgagatgagg | aagtgttgaa gggtgatact teetgetttt attgttgace acagagtggt | 60 |
| acctggagat | atgtcgcggg ggtcacgaga cctctgtgac gtcttgtttg gtgcttttgt | 120 |
| <210> <211> <212> <213> | 5059 330 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5059 | |
| agcttcctgc | aaccattagc actccatntn ttatgnttat tcagtaaacc aattgagtca | 60 |
| tcaactgcaa | ctaaactctc acaccaatca tatgaaagtt tctttcaatt tgggagatca | 120 |
| gatacattat | gtatctgtgt taaaaaatcg cactggtcaa aattcaaaac tcttagatgc | 180 |
| cagaactttc | tgcaaggaaa aaaaaaaaag aagatgacat cagaaccata tgaataaact | 240 |
| ttaagtgaat | ttaataattc atgggatgag gatatctgtc atgtaactcg ccttggatga | 300 |
| gcgatggaac | tcacatgaca taatggaact | 330 |
| | | |
| <210> <211> <212> <213> | 5060 290 DNA Glycine max | |
| <211> <212> | 290 DNA | |
| <211><212><213><213><400> | 290 DNA Glycine max unsure at all n locations | 60 |
| <211> <212> <213> <223> <400> tgccttctga | 290 DNA Glycine max unsure at all n locations 5060 | 60 |
| <211> <212> <213> <223> <400> tgccttctga ttcaatatat | 290 DNA Glycine max unsure at all n locations 5060 tttgagttga tcaagctttt tgctntttta tgggtcaatt tggattattc | |
| <211> <212> <213> <223> <400> tgccttctga ttcaatatat cttacgtaat | 290 DNA Glycine max unsure at all n locations 5060 tttgagttga tcaagctttt tgctntttta tgggtcaatt tggattattc ttattctttt gctgctacgt tgttatgcta tttttttcc aatgtattta | 120 |
| <211> <212> <213> <223> <400> tgccttctga ttcaatatat cttacgtaat tgtttgctga | DNA Glycine max unsure at all n locations 5060 tttgagttga tcaagctttt tgctntttta tgggtcaatt tggattattc ttattctttt gctgctacgt tgttatgcta tttttttcc aatgtattta tgtgttcaaa acagaagtag aagtaactat ttcattatt ttatgatatt | 120 180 |
| <211> <212> <213> <223> <400> tgccttctga ttcaatatat cttacgtaat tgtttgctga | DNA Glycine max unsure at all n locations 5060 tttgagttga tcaagctttt tgctntttta tgggtcaatt tggattattc ttattctttt gctgctacgt tgttatgcta tttttttcc aatgtattta tgtgttcaaa acagaagtag aagtaactat ttcattatt ttatgatatt gtagagctaa atattcatt ctttctgaga gttttttct ctcttctggt | 120 180 240 |

| agcttgtaag | ttacaaaata | gagaaattct | atagaaataa | aatgcatcct | tttgtattta | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atcattttat | tagattatgt | aactactacc | aactaacttt | aattaaaata | agttttattc | 120 |
| tctttatata | tattcctcat | cctatatcac | cacttatttt | cttagtattt | aatggttcta | 180 |
| aagaataatt | gttcttgaca | aatattatgg | aaaacaataa | gtgcttcaat | tctttcacaa | 240 |
| attaggaaat | gaaagttagg | aatttttta | ggtttcaaca | gcaacaccaa | aggtaggaac | 300 |
| cacgatataa | gggcagttcc | atttgattnt | gatctcagat | tttgtttaca | aaaaccaact | 360 |
| tgaaaatcta | aacataaaat | attaaagaac | ttgcagacat | atcccagcta | gctgggaata | 420 |
| ca | | , | | | | 422 |
| <213> | 5062 347 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5062 | all n locati | ions | | | |
| tggaggacaa | aacanagtag | tgtacaagta | cttggtgcta | tggcataccg | tgctcctcag | 60 |
| catttgtctc | ggtgtctccc | taagattgtt | ccaaaattgg | ctgaggtata | atatgaagca | 120 |
| aacattattt | ttcacttcta | aattcctttt | aagctataga | ttgcattacc | ttaacccatc | 180 |
| tcagtatttg | aagggtttga | ctgataaaga | gtccagaaat | atctggtctt | gtccctactc | 240 |
| tacttaagta | aattggtgtt | ttcagtatct | agagggagga | ataanagtaa | ttctttngaa | 300 |
| attatggcat | anaaaatcat | cattcaattc | cactctactt | ttatatg | | 347 |
| <210> <211> <212> <213> | 5063 280 DNA Glycine max | x | | | · | |
| <223> <400> | unsure at a 5063 | all n locat: | ions | | | |
| agctntgtcg | gattggtctt | cgccagtgaa | aggatcgatg | tgggtctgaa | aagtggcaaa | 60 |
| tttagtcatc | ctgcttggac | gaatgagaaa | attgtggcaa | atgaagaggg | tgaggatgaa | 120 |
| gtataagccc | atgctgtgac | tgccattcct | atatggccaa | gtatcccacc | aacccaacaa | 180 |
| tgtcattact | cagccaataa | caaaccttct | ccttacccac | cgcccagtta | tccacaaagg | 240 |

| caatccctaa | ataaccacaa | aatgtattgt | ctaaagatgg | • | | 280 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5064 306 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tatatactct | aatgtacaga | ttataaagca | agttccactt | gatatatgca | tganaaacaa | 60 |
| agataataga | aattaaaact | aggttgcctc | ccaggaagca | cttctttaac | atcattagct | 120 |
| tgacgcattt | acctcaatgg | gtgatatcat | gttttggttc | ttacctccag | aacctcttga | 180 |
| cccacttcca | ttacctgtaa | gcaaacattt | tgttctagag | caggettgte | ttcaacaaac | 240 |
| aaatcaaaat | caattttctg | atcttcgaaa | cccatttcca | gcttctttct | acccatatca | 300 |
| actatg | | | | | | 306 |
| <210> <211> <212> <213> | 5065 287 DNA Glycine max | ς. | | | | |
| <400> | 5065 | | | | | |
| | | | | tgattacgga | | 60 |
| tcaagacgct | aaaaattgaa | cacggaagct | cgggcccaat | tcaaactggc | ataacttttg | 120 |
| acttagatgt | ctgattgtgg | accatattcc | aactgccatg | attggtgatt | ctgatgtttg | 180 |
| actacggccc | ataatatatc | aagactcttg | aaattgatta | caaaagctcc | tcacaaatta | 240 |
| aactaccata | acttttgatt | ggatgtctga | ttgtggccga | taatata | | 287 |
| <210> <211> <212> <213> | 5066 375 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tgtaggcatt | agaagagaat | gcacatatga | ttagaagtat | gactgaaaat | gttagttagt | 60 |
| tgtaagattg | attgtgaagg | aatgcattaa | ctgtatcccg | gtgagagtgt | gatccttana | 120 |

| ttatgagaga | aacgactatc | atttagtact | gatttttgcg | tgaatctttg | aagtatgaag | 180 |
|-------------------------|-------------|--------------|------------|------------|------------|-----|
| gccatgtttg | attgtgatag | ccacttagcc | aaaaagctga | ccatgtgctt | gaatgaatta | 240 |
| tccctcatac | ctangatgag | ttgaatgaat | tattgattga | ttgaacccag | agcctataca | 300 |
| attatctcat | gctaccttga | cttanggtgt | angagagcat | catccacagg | aagcgcagtt | 360 |
| canagcaaat | ttgtc | | | | • | 375 |
| | 5065 | | · | | | |
| <210> <21 1 > | 5067 384 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctattctt | cgtgggttga | tgggttctgt | ctcgtaaaat | ggcatgatca | ctggatgaca | 60 |
| tgttctcaat | tagctcagtt | gcttcttccg | gggtcttcag | ttttatcttt | cccctgcag | 120 |
| aagcatctag | cagttgcttg | gtttgtggtc | tcagcccatc | tataaacata | ttcaattgaa | 180 |
| ttagctcgga | aaacccatgg | gtgggagttt | ttctcaataa | acctttgaac | ctctccaatg | 240 |
| cttcacctag | agattcatca | gggaactgat | gaaatgaaga | gattgcagct | ttcccttcca | 300 |
| cagccttgga | ctttgggaag | tatttcttta | ggaacatttc | aacaacttca | tcctangttn | 360 |
| tcagattgtt | acccttaaat | gagt | | | | 384 |
| <210> | 5068 | | | | | |
| <211> | 305 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | K | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ntgaagggcc | gaaagagact | agtcgagagt | caaaggtatg | atattagagg | acgggttgaa | 60 |
| ggcttgtcaa | aggtcaaaga | agagcttgtc | tgaacaatta | agtaggacgg | aagagaagat | 120 |
| gtgggatatc | attgacctgt | ataaagagaa | gcaaaatcta | gctgcaaccc | atgagcaaag | 180 |
| actagaggac | gagcatgcaa | aagtatcggt | cctgcaagcg | gaaagggaag | caagggagag | 240 |
| agtgatagat | tcattataca | gagaagctat | gatgtggatg | gataggttcg | cgttcacttt | 300 |
| gaatg | | | | | | 305 |

| <210> <211> <212> <213> | 5069 411 DNA Glycine max | ζ | | | | |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| <400> | 5069 | | | | | |
| tttttattct | tacactgtgg | tctttacaaa | catggcttta | taaagactac | aacaatctta | 60 |
| acaagagggt | tatcataatg | ctaacttgtt | tttctcaatt | aggggtgcaa | aagtctccac | 120 |
| gaaagtactt | gggttctctt | taataatacc | tccagatagg | cgtttaaaaa | tccaagcgtt | 180 |
| tctttatgaa _. | gggaataatt | attcgatact | aacatctttt | ctttcaactg | ggtggtcctt | 240 |
| tggttgcaac | catacaaaca | ttgtttgttc | aatgttcgga | acaaaaaatt | gttgaataaa | 300 |
| taagcgttgg | gagggatcgg | tttacatttc | acactcttat | aaccgctgtt | tcgtatattg | 360 |
| gtacaaactt | ttgtggtgtt | aaggaaaatg | taaacaacaa | tcttggctgc | g | 411 |
| <210> <211> <212> <213> | 5070 364 DNA Glycine max | k all n locat: | ions | | | |
| <223> <400> | 5070 | il in rocat. | 10115 | | | |
| tgtgggattn | tgtgatagtg | attnttccga | agatgttgat | gatagaaaaa | gtactaccag | 60 |
| atttgtattt | tttatgggtg | attgtgtttt | tacatggagt | tctaagaagc | aaggcattgt | 120 |
| gacactttct | acttaatagg | accttcataa | ctcttcagat | gagaagaaga | gaaactatat | 180 |
| gtgatggctg | gtatattgga | gatcatagtc | ttcttatagg | gtgttaacct | aataggattc | 240 |
| tcattactct | ctaataggcc | aacactgaca | tctgctcgtt | taagtccata | tcatttgatt | 300 |
| ttgtttttga | ttgtctaacg | gaggatcatt | tatttgatca | ataagataaa | ctcataatga | 360 |
| taat | | | | | | 364 |
| <210> <211> <212> <213> | 5071 451 DNA Glycine max | × | | | | |
| ~100× | 5 O 7 1 | | | | | |

| ctgcaagctt | ggatattgta | atgttttctt | actaattgtg | gttatttgat | tttggtatta | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atttctttta | taataaactc | actcctcgca | attttgtacc | gtgtggttac | tgtgaagatt | 120 |
| gccaaccttt | gttcgtggga | gtagaatgac | aatagtagag | tacaagaagt | gagattcttt | 180 |
| tgtgaaaccg | ctgaaccgac | gtgatgacgt | tggattattt | tggaagagag | ttgtgttttg | 240 |
| ttaatcaatt | cctccatagt | tggttccatg | attcttttta | ttgacttaaa | gatgtaaatc | 300 |
| acaaatttaa | ttatatgtat | gaacaaattt | actttctatt | atgtgaatga | tatgtactga | 360 |
| gttactatac | ctatatatat | atatatatat | atatatatat | atatatatat | atattcactt | 420 |
| aagtaatgat | gcgttgtttg | tgaatgtata | t | | | 451 |
| <210> <211> <212> <213> | 5072 239 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ntcccttcat | ttcnaaattt | annaaattgt | ctcttttgtt | ttcttccatt | tcatcagaac | 60 |
| aacaagctag | tgagggaacc | ctgttccaac | aataaaccat | gtatttcatg | tcagcataaa | 120 |
| aaaagaatcc | aaatccacaa | acttctgcat | aacttgtcat | gactcaaagc | agcaataagg | 180 |
| cagcttaatg | agacaatatt | caaccattat | attatatcaa | ttggaacgcg | gagggggg | 239 |
| <210> <211> <212> <213> | 5073 512 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5073 | all n locat | ions | | | |
| cgcgatgtnt | agtttgaaat | cgtctcgtac | cttggatcct | tagagtcacc | tgcngctgca | 60 |
| gcttgtctag | cgtttatgcg | agacagagac | caacatgtta | actatcatcg | cccaatacga | 120 |
| agaagaatta | tgtctagcca | cggcccacca | acataaaatc | gcggatgaat | atgctcaagt | 180 |
| atatgccgaa | aaaaaggcta | gaagaagggt | gatccactct | ttacaccaag | aggcaaccat | 240 |
| gtggatggat | cggtttgctc | ttaccttgaa | tgggagtcaa | gaacttcccc | gattgttaac | 300 |

aaaggccaaa gcgatggcag acacctactc cacccccgaa gagattcatg ggcttctcgg 360

<210>

5076

| ctattgtcag | catatgatag | acttaatggc | ccacataatt | agaaatcgtt | aggaaacttg | 420 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tatggtctct | cagaccttga | ctggatacga | ctttttttt | tttttttt | tttttttt | 480 |
| tgaaaaaaat | gagatggccc | attgttctac | cn | | | 512 |
| <210> <211> <212> <213> | 5074 464 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 5074 | all n locati | ions | | | |
| nggcttagca | catgaagaga | tggcgcttag | cgcaaggttt | gcgctntgcg | gataagcaat | 60 |
| ttgaaaattt | tctaagtcat | tttctactta | tctcttcaca | cataatttta | acaacccttt | 120 |
| ntgttcatta | ctaaacaagc | tgaaatcaat | cacaatcaca | agcaagatga | cctaactaca | 180 |
| tgcaagaaat | aaaaatgaag | atagagaagg | gaaagaaaag | ctgggttgcc | tcccagtaag | 240 |
| cgcttcttta | acgtcattag | cttgatgcat | catcctatta | tctaggatcc | aataatgttc | 300 |
| ccacttcaag | gaccttcttc | ttaggttntc | tttcctcctt | cacatgaact | ntanaataga | 360 |
| cattccggtc | aggtggctct | ntatcttcat | gaaataaatc | anagctgatt | ttctaatctt | 420 |
| ctatgcccat | ntgcaacatc | ttctttccca | tatctactac | acag | | 464 |
| <210> <211> <212> <213> | 5075 323 DNA Glycine max | × | | | | |
| <223> < 4 00> | unsure at a | all n locat | ions | | | |
| agcttgccgc | ccagctcgcc | caggcgagca | aggttgcttc | ctccagaagg | aacggcccaa | 60 |
| gtgggcctgg | ttgctattta | cacccccatt | tttactaaat | gcaccccctt | tctattttt | 120 |
| tgtaattctt | tttccgtaac | gttacgaaac | tttacgaatt | ccgtaacgat | acttattttc | 180 |
| cttctgcaag | gttatgaatc | cttacggatt | atgtatttac | tctnttttag | ctntcgaaga | 240 |
| agttacggaa | acccccggat | tgcgcaaaaa | cacctctttt | cgacttccgc | cacattacgg | 300 |
| aatttcacgg | atcgcgcaag | cct | | | | 323 |
| | | | | | | |

| <211> <212> <213> | 424 DNA Glycine max | | | | | |
|---|---|--|---|--|--|---------------------------------|
| <223> <400> | unsure at a | ll n locati | ons | | | |
| aaagttaact | anatgccttg | tgttacctgg | ttacccaact | ggccatgaat | taaaaatatg | 60 |
| cacctgtcgt | cagactctgt | agtttatgct | cctctaccga | ccaccacaca | gacctttgtc | 120 |
| cttttgtgca | acaatctgaa | gcaattgaac | agcctaaagc | ttatgctgca | aacatctaca | 180 |
| atagacctcc | tcaacctcag | cagcaaaatc | agccaccaca | gaacaactat | gaccttctcc | 240 |
| gcacacgtac | aatccagggg | aggaggaata | ttccaccgta | gaagtcgaag | ccttcctaca | 300 |
| accgccataa | aaccacaacc | ttattttata | atgtactggg | ccagcagaca | taagatcttc | 360 |
| gctatctttn | actcacagcg | gaatcgccct | ataacgaaat | cttgacgctc | cgcccacctc | 420 |
| actg | | | | | | 424 |
| <210> <211> <212> <213> | 5077 352 DNA Glycine max | | | | | |
| (213) | GIACTUE Way | • | | | | |
| <400> | 5077 | | | | | |
| <400> | | | cctcgacata | caagctttta | gaaggactac | 60 |
| <400> | 5077 | ttcactgtgg | | | | 60 120 |
| <400> agcttatggt aacaatctga | 5077 agttaactct | ttcactgtgg cagcagagtg | caaacttgtt | ttccaaattc | tggtgtgcaa | |
| <400> agcttatggt aacaatctga aagttccaac | 5077 agttaactct acaagagggt | ttcactgtgg cagcagagtg gttttctctt | caaacttgtt ggaaattact | ttccaaattc | tggtgtgcaa cttccaacag | 120 |
| <400> agcttatggt aacaatctga aagttccaac cacaagcgct | 5077 agttaactct acaagagggt gaaagtactt | ttcactgtgg cagcagagtg gttttctctt ggagttatta | caaacttgtt ggaaattact ttcaagacta | ttccaaattc ccaagatagg caatttttca | tggtgtgcaa cttccaacag tgcaaactgt | 120 180 |
| <400> agcttatggt aacaatctga aagttccaac cacaagcgct gtggccttga | 5077 agttaactct acaagagggt gaaagtactt ctagaggagg | ttcactgtgg cagcagagtg gttttctctt ggagttatta aacaatcatt | caaacttgtt ggaaattact ttcaagacta tgttcttact | ttccaaattc ccaagatagg caatttttca atgtccggta | tggtgtgcaa cttccaacag tgcaaactgt attaacagat | 120 180 240 |
| <400> agcttatggt aacaatctga aagttccaac cacaagcgct gtggccttga tgtgggaaag <210> <211> <212> <213> | 5077 agttaactct acaagagggt gaaagtactt ctagaggagg ggtggaaacc agttatggca 5078 272 DNA Glycine max | ttcactgtgg cagcagagtg gttttctctt ggagttatta aacaatcatt tgggtgggaa | caaacttgtt ggaaattact ttcaagacta tgttcttact | ttccaaattc ccaagatagg caatttttca atgtccggta | tggtgtgcaa cttccaacag tgcaaactgt attaacagat | 120 180 240 300 |
| <400> agcttatggt aacaatctga aagttccaac cacaagcgct gtggccttga tgtgggaaag <210> <211> <212> <213> <400> | 5077 agttaactct acaagagggt gaaagtactt ctagaggagg ggtggaaacc agttatggca 5078 272 DNA Glycine max 5078 | ttcactgtgg cagcagagtg gttttctctt ggagttatta aacaatcatt tgggtgggaa | caaacttgtt ggaaattact ttcaagacta tgttcttact tggattacaa | ttccaaattc ccaagatagg caatttttca atgtccggta atcccaatca | tggtgtgcaa cttccaacag tgcaaactgt attaacagat ta | 120 180 240 300 |
| <400> agcttatggt aacaatctga aagttccaac cacaagcgct gtggccttga tgtgggaaag <210> <211> <212> <213> <400> tggatttcct | 5077 agttaactct acaagagggt gaaagtactt ctagaggagg ggtggaaacc agttatggca 5078 272 DNA Glycine max | ttcactgtgg cagcagagtg gttttctctt ggagttatta aacaatcatt tgggtgggaa | caaacttgtt ggaaattact ttcaagacta tgttcttact tggattacaa tcctaagatg | ttccaaattc ccaagatagg caattttca atgtccggta atcccaatca gagccaaacc | tggtgtgcaa cttccaacag tgcaaactgt attaacagat ta cagtcaccct | 120 180 240 300 352 |

| tctctatttg | gttcttaacc | ctctcatgca | acttctttac | aaactctgac | ctagattccc | 180 |
|---------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cttctttatg | tataaaagaa | gtgtctagtg | ggaggggaat | gtgtctagtg | ggaggggaat | 240 |
| gatggctaac | tgcgacatcc | tggacatttc | ta | | | 272 |
| <210><211><211><212><213> | 5079 409 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctntggca | cttgtcttca | cactaatttt | gaattgaaat | ttccaattat | agaaataaat | 60 |
| ttgagccaaa | acaacaagca | cctttccctt | tcaccttttt | tttctggata | ctgattttcc | 120 |
| tgccaacatg | tgcgattttt | cgtattttt | ccttttatcc | aaatcacttg | tttcttttt | 180 |
| tataactttt | ttccagatgt | ctagaaaatt | cagtaaaaat | ttcagctcan | aattcgaggt | 240 |
| aaccaattct | cagtaattnt | tacaagtttg | tatgtccaag | ctgccagcac | cagcgatttg | 300 |
| tttctttaaa | catggtatat | ngattgcctt | gggcttactt | tcaaccttcc | tatgtatgtt | 360 |
| gaactcacta | gtattgttta | ccacagnttt | agggtgttca | atattcact | | 409 |
| <210> <211> <212> <213> | 5080 258 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tgccacccag | ctcgcccagg | cgagcaaggt | tgcttcctcc | agaagcaaca | gccttctgga | 60 |
| ggaaggatct | ggaaggccca | agtgggccag | attgttattt | gcacccctcc | tttntactaa | 120 |
| atgcaccccc | cttctatttt | tttggtaatt | ctttttccgt | aacgttacga | aactttacga | 180 |
| atntcgtaat | gatacttatt | ntccttccgc | aaggttacga | atccttancg | gatatgtatt | 240 |
| tactcttttt | tagctttt | | | | | 258 |
| <210><211><212><213> | 5081 263 DNA Glycine max | c | | | | |

| <223> <400> | unsure at a | all n locat: | ions | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tggggccaaa | cacaccaaat | gattataatg | atggatggct | caaattctca | caaaggtaaa | 60 |
| atcattactt | tcaaaactat | catgacatgt | agagaaaaat | caaggatttt | cagtcacaaa | 120 |
| atgtcaagaa | cttttatttt | tcaaacaatt | acccatttat | ttcttgaaca | tattctataa | 180 |
| ttcaaagaan | aacatgcaaa | gtcgtgcgtg | cacacgaaat | tgacccaaaa | tattaaactt | 240 |
| aanatccgac | gaaactaaca | aca | | | | 263 |
| <210> <211> <212> <213> | 5082 356 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a 5082 | all n locat: | ions | | | |
| tgtgtcacac | tttcaattgt | cgaagctgaa | tacatagctg | caagaagttg | ttgtgctcaa | 60 |
| agtctttgga | tgaagcaaca | atgatgtaag | ctccattgga | gcttgtaggc | ctaggatctt | 120 |
| cttcatcaat | ggattccttt | gcttcttgga | agatgaatgg | cagcggaatg | gagaaaggaa | 180 |
| gagagagagg | agacgccact | tcaaggagaa | gatgagtcta | gaagaagctc | accaccatag | 240 |
| gaggccatgg | ataagagctn | ggaggaagaa | agagatgaat | gaagggagag | ggagagaaga | 300 |
| agcacgaaat | ttgtgctcta | aatgagcttt | gagatccgaa | gtntaatatt | caaatg | 356 |
| <210> <211> <212> <213> | 5083 214 DNA Glycine max | ς. | | | | |
| <400> | 5083 | | | | | |
| atatccctca | atttatctca | ttttacatgg | tatcaccaga | gaaaatatga | ggctaagctg | 60 |
| aataaatgga | accacagaaa | catttcgatg | gctgggagga | tcactctaat | caatgctgtc | 120 |
| ctaacagcat | tgcctttggt | ctatttggta | ttcttcaggg | cccctataac | agtgattaat | 180 |
| agattaattg | ccatccaaag | gcactttctt | tggg | | | 214 |
| <210> <211> | 5084 329 | | | | | |

| <212> <213> | DNA Glycine max | : | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a | ll n locati | ons | | | |
| taccctagat | gacactcatt | gtacaaccaa | gttcataact | tagtcacttt | taaagtcctg | 60 |
| ctgactgagt | acaaagtgac | ttgcaaccgt | ttggtgagtt | attaagcact | cacttgtatg | 120 |
| tcaaattnta | aaatcatata | catatctaat | atgaatttca | tgttaattac | aggatgtgcc | 180 |
| gagtacctgt | actcatttat | gaaagctgta | agattcaccc | atatgaactt | gaaagagact | 240 |
| acgaagtata | ggataattta | taatcattgt | aggaagattg | caaacattgg | aaatggatgg | 300 |
| aggaatttca | taatcacaaa | attttctta | | | | 329 |
| <210> <211> <212> <213> | 5085 414 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5085 | ill n locati | lons | | | |
| agcttgttgt | cattaaatct | tacatgaatg | gccttttcta | cagtcaaggt | tctggagtta | 60 |
| tgcactctgt | atgccttgga | caattcaaag | tattcaagta | agattctaga | atcacactag | 120 |
| gagtcaaact | ttccaagttt | atccttggtg | tttaagatga | aacgctgaca | tccaaatgag | 180 |
| tggaagtaag | agatattggg | cttacgtctc | ttccataatt | catagggact | tctttaagat | 240 |
| aggccttatg | taaattttgt | tctataaata | ccaggaaaca | tttacagctt | caacccataa | 300 |
| atctttggga | gttgagtgat | cgttaagcat | tgttcatgcc | atttcctgaa | gagatattnt | 360 |
| tttcctctca | acaacttcat | tctgttgtgc | tgttcttgga | gtgggaaaaa | tatg | 414 |
| <210> <211> <212> <213> | 5086 311 DNA Glycine max | ζ | | | | |
| <400> | 5086 | | | | | |
| tgttgtgtcg | tccccgtttc | tgcctaaacc | catttctggc | tcatatccat | cccttaacat | 60 |
| aacccgagcc | accatcaaag | cgacaccaga | taagcgtggc | tgcaccagaa | gagattccac | 120 |
| atatgcaatg | ctcacaattt | ccaatgcttg | gaaggatgtt | tccaatgact | catctacagc | 180 |

| ctcaacataa | ggcgtagaag | acagacaact | tactagtatg | tcttcctctc | ccgatactat | 240 |
|------------|------------------|--------------|------------|------------|------------|------|
| gatcagctgc | ctttccacta | caaactttaa | tttctggtgc | agtgttgacg | ggaccacccc | 300 |
| aaccgaatgg | a | | | | | 311 |
| | | | | | | |
| <210> | 5087 | | | | | |
| <211><212> | 337 DNA | | | | | |
| <212> | Glycine max | | | | | |
| | | | | | | |
| | unsure at a 5087 | all n locat: | ions | | | |
| <400> | 3007 | | | | | |
| agctnttaca | atatccaaac | aattcaattt | tctttgtcat | gaaaccaccc | taaaccaaga | 60 |
| aaaatagagt | ggaggccgaa | aactctacac | aaaactcatt | tcaattccac | agtttttcct | 120 |
| actcacatac | ctcaataaca | gtctctttgt | ttcgaatcgt | caaccattgg | atcgccttga | 180 |
| | | | | | | |
| aaatttaact | gagagttcct | aatatagaaa | tttagttttg | accgttggga | tctgctagaa | 240 |
| aatatataga | acaccagatg | tactaccttt | cccgtgacta | gtgttgcaca | accatttttc | 300 |
| tgcataattg | gaaaatctgt | tgacaacttg | aagcttt | | | 337 |
| | | | | | | |
| <210> | 5088 | | | | | |
| <211> | 347 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 5088 | | | | | |
| ntccaagagt | tttctggttt | tctaaacctt | gaaaacttgt | gctattcatt | cttttcaact | 60 |
| | | aattcgccaa | | | | 120 |
| | | | | • | | 4.00 |
| ctcttctccc | ttttccaaaa | gaacaaagga | ctaaccgcct | gaattetttt | gtgtctccct | 180 |
| tctcccttgt | caaagaattc | aaaatgacac | agtctgagaa | ttcttttgat | tcttcccttt | 240 |
| cccttataca | aaagatttca | naggactaat | tgccagagaa | ttcttttgta | tccccattca | 300 |
| caaagtttca | aaggtttaac | cacttgagat | ctttgtctta | acacatt | | 347 |
| | | | | | | |
| <210> ' | 5089 | | | | | |
| <211> | 401 | | | | | |
| <212> | DNA | | | | | |

Glycine max

<213>

| <223> <400> | unsure at all n locations 5089 | |
|-------------------------------------|---|-----|
| gaagtgaaat | aattgattat gaaatgccga acaaagaaag aattgaatga gttaattgat | 60 |
| tacccaattt | gcttatcgat taaaattggt aaaactatta atacctttgc ttattctcac | 120 |
| tacaagaaaa | aatgatttta acgagggtta ttttttgcct taaggagggg ttaaaccccc | 180 |
| cgaaagtatg | gtacctattg gtggtgttct cattggcaaa acatccacga taaatggttt | 240 |
| accaatggtt | tttgtgaacc ctttaaaaca caagaaatac ttgatgtgtt gaaacccctg | 300 |
| gtaaatacca | agggttatta acccctatta acaccacaat cattgctggc gatttaaaac | 360 |
| ccttgttctt | atangggttt aaattgccgt atacatttat t | 401 |
| <210> <211> <212> <213> <223> <400> | 5090 357 DNA Glycine max unsure at all n locations 5090 | |
| tcaataataa | catagaattc ccaagtatat gtagatagtt tctgcattct accagacaat | 60 |
| ttttttttag | aaataagcaa taggatgctt gttttggctt aacacaacac | 120 |
| ccctgaagca | tcagtttcta atacaaaaag tttattgaaa ttaggaatag ccaagacagg | 180 |
| tgcagaagtc | atggctatct taagtttttg gaaagcctgg gcagtagctt gaccccattt | 240 |
| gaaagagtcc | ttcttcaata gaacagtcag aggtgttgca atggtagcat aggtcttaac | 300 |
| aaatcttcta | taataacctg taagtcctag gaagcccctt aatntcttta gattcat | 357 |
| <210> <211> <212> <213> | 5091 403 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5091 | |
| gatcctctta | gtcacctgcg gcatgcagct tgctgaatac attctncccc tctgtctatt | 60 |
| ctaatctntn | ttatatcatc aaaacctgca tgatttacat tctccccctc tgtgatgatg | 120 |
| acaagcatta | tccaaggctt gatctntttg acatcatcaa aatcttcatg atttacattc | 180 |

| tcccctttg | tgatgatgat | aaccacctat | aagtgatgag | caacaacaaa | gaaaaaatat | 240 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ctatttgcat | atagtttaca | tcccctttgg | ttttggaatg | cttgcttata | tgagaccatt | 300 |
| gaagatttca | tattcttcat | atataaaaag | tgtctcataa | agatagacat | ctttccttct | 360 |
| aatttatctt | gatattactc | teceettgg | cccatcaaaa | caa | · | 403 |
| <210> <211> <212> <213> | 5092 433 DNA Glycine max | c | | | | |
| <400> | 5092 | | | | | |
| ggttaatata | ctataagtgt | catgaatctc | tgacataagc | ttcaaccaat | taacattgtt | 60 |
| cgaatgacaa | ctgtagtagt | tgcaccgcac | tcacatacgc | tggccaccat | cggttgctgt | 120 |
| acgatcctat | cggctatagt | aacggcatgc | tctatgcttc | ttctgttata | gctacggtgg | 180 |
| cagaaagtct | aacttttgaa | tccacaaaag | gaggatetee | atatggtgct | ggagtcttgc | 240 |
| tcgagatggc | agaaaacaag | cacaggaaat | ggaactggag | cctgcacagt | atcatgcaac | 300 |
| gattataaaa | ctagcccata | aatcattaac | cctctaatca | acatcttatt | gactaaacaa | 360 |
| accttgtgac | ctcaaataca | ctcaagacgg | ttgcttaaac | actctaatta | aaagcggcag | 420 |
| tgaatcatgg | ttt | | | | | 433 |
| <210> <211> <212> <213> | 5093 423 DNA Glycine ma: | ĸ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctntacga | tagtttactg | aatcattatt | ttatggaact | agttaacgta | ttggtttaat | 60 |
| catgtttcaa | taggtattac | ttaagtacta | ttattctaat | tttaatataa | tacgcaatat | 120 |
| ctagtgaaat | atatgcatgt | ctgaacctat | ttctggtcca | actaaagctt | aattaatact | 180 |
| tcggtaataa | aatgtttaat | actattatga | cttatcttta | taaaaaagac | tgacaataat | 240 |
| attattttaa | aaaactaatt | atttggtact | gcgtcaccca | atattgatta | aacttattaa | 300 |
| acacaactca | cgcactttat | tatatcgtat | gatatgagat | gtgctacaag | acaaaaatat | 360 |
| caaacaattt | cctctgatgc | ttacatatgt | aatgattctt | cacatgctgt | ctatgctatt | 420 |

| gat | | | | | | 423 |
|-------------------------------------|---|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5094 307 DNA Glycine max | | | | | |
| <223> <400> | unsure at al | l n locati | ons. | | | |
| agcttctatg | agaagtttct c | aagacagct | ttcttaggaa | gctacctaat | ctataggtag | 60 |
| aagcatgtgt | aacacttgtt g | taactctga | tgaatgagag | tcttgtgaga | catattgcaa | 120 |
| agttccactg | ctctacctct t | ttattcctt | caatntcgtg | ctccccctc | tctccttctc | 180 |
| tccctctttc | ttttcctcca t | tgaagcatc | ctctccaagc | ttcttatccc | aggcccactc | 240 |
| ttgtagagaa | tcttcatctt c | catggctta | ttccctaggg | gatggcgcct | cctctcacct | 300 |
| cttctcc | | | | | | 307 |
| <210> <211> <212> <213> <223> <400> | 5095 405 DNA Glycine max unsure at al | l n locati | .ons | | | |
| | tataacaaac t | aatttatot | tttataaana | atacttcaag | ataaatotot | 60 |
| _ | aacaaaataa c | | | | | 120 |
| | ataacttaaa a | | | | | 180 |
| | atgatatccc a | | | | | 240 |
| gcagcagcca | aaacagctga a | aaatatggt | gaaggagggc | tgtatttaaa | gatcctaaaa | 300 |
| cgccaacctc | atttgcgcca t | tttctactc | taaaacgcta | acatgatttg | acctccagac | 360 |
| ccctaagacg | ccaacattga a | agctgctcc | tgctttccaa | agcta | | 405 |
| <210> <211> <212> <213> | 5096 347 DNA Glycine max unsure at al | l n locati | ons | | | |
| <i><u>\4437</u></i> | unsure at at | 1 II IUCALI | .UIID | | | |

| <400> | 5096 | | | | | |
|----------------------------------|-----------------------------------|---------------|------------|------------|------------|-----|
| agcttgcatg | tgcatgctga | gcggacatgc | atagtacaat | tggcttaagt | gaccacacgc | 60 |
| taagcctgca | aatgcgcgct | taacgcacat | ccacgataaa | tctgacttcc | agcttggctt | 120 |
| cttgcactaa | gcatgcactg | gcgcgctgag | tgtgctgctc | caattcttca | tacatcttcc | 180 |
| attcttctgt | tgatgcatct | aaaaattcta | canaataaaa | canaacattg | tanangtacc | 240 |
| aactntagca | ttcttaagat | aagaactcaa | agaaaatcta | aattcctatc | ttttttagtc | 300 |
| aaaagaagta | tcaaaagaga | agaaattaga | taatttctat | ttgtatt | | 347 |
| <210> <211> <212> <213> | 5097 389 DNA Glycine max | | ons | | | |
| <223> <400> | 5097 | III II TOCACI | LOIIS | | | |
| agcttaatan | atctatatat | gatttanagc | aagtctccca | tcagtggtac | cttaagtttc | 60 |
| atgggctaaa | ttcctcattt | ggttntgatg | aaaaccccat | ggatcaatgc | atataccaca | 120 |
| aggtaagtgg | gagtaaaata | tattctctta | ttttatatgt | agatgatatt | ttacttacag | 180 |
| ccaatgatca | agttttgcta | cataaggtga | aacaatttct | ctccaagaat | tttgacgtga | 240 |
| aġgatatggg | tgatgcatct | tatgttatcg | gcattaagat | tcatagagat | tgtagaagca | 300 |
| ngcttcatga | tgatgaatca | agtagttttg | atgatgacaa | aaagcccaca | agaatgatgt | 360 |
| caagattgag | tcaacaagtt | caagatcaa | | | | 389 |
| <210> <211> <212> <213> | 5098 403 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 5098 | all n locat: | ions | | | |
| ggatcttaag | cacctgggct | gcagctataa | aacaaaatgc | ctnatcattt | tcaatatgca | 60 |
| tgtgaattan | gaagcatgaa | caagaattaa | gccaaggcta | ttgtgcaagc | aatcaatggg | 120 |
| gcaaaacaca | ccaaaagatt | atgatgatgg | atggctcaca | ttctcacaaa | ggtaagctta | 180 |
| tcactttcaa | attgagcttt | caaaactatc | atgacatgta | gaggaaaaac | aaggatttca | 240 |

| aatcacacaa | tgtcaagaga | cttttatttt | cagaacaatt | accanagctt | gatttgtgag | 300 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| ttgatnttag | ccttggtttc | acttttgatt | attagtcaat | aattcaagga | aactttcana | 360 |
| gaaaacgnct | gattggattt | tcttgataaa | tttatatttt | ttc | | 403 |
| <210> <211> <212> <213> | 5099 321 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 5099 | all n locati | lons | | | |
| gcttatgctg | caatattaca | atagacctcc | tctacctcag | cagcaaaatc | aaccactgta | 60 |
| gaacaattat | gatctctcca | gcaacagata | caaccctgga | tggaagaatc | accctaatct | 120 |
| cagatggtct | agccctcaaa | agcaacaaca | acagcctgct | ccttccttcc | aaaatgttgt | 180 |
| tggcccaagc | agaccataca | ttcctccacc | aatccaacaa | cagcaacagc | ccctgaaaca | 240 |
| gccaacagtt | gaggctcctc | cgcaaccttc | cctcgaagaa | cttgtgaggc | anatgaccat | 300 |
| gcagaacatg | cagtttcaac | a | | | | 321 |
| <210> <211> <212> <213> | 5100 395 DNA Glycine max | x all n locat: | ions | | | |
| <400> | 5100 | | | | | |
| ttgtcagaat | atgattatta | aacacacaaa | atggaagtac | taagtattta | ttacctatac | 60 |
| ttaacataaa | gtacttataa | cactacaaac | taaccataaa | ttgtggaagt | ttgatacaat | 120 |
| ttacacaggt | tttacacaca | aaagttagtc | gtattcctgt | tgtatggctc | cgcctcctcc | 180 |
| aacgaagtgt | ggaaattcat | catccctcag | ctgcccttgt | ctctgtgtga | ggaatgacca | 240 |
| tcttttgatg | gcctcgaaac | gctattgatg | ttccacactc | tgaaatcggt | gtttgtcaaa | 300 |
| gcctgtttcg | acttgtgggg | ccacatngga | atcctcttca | atggtgcctg | tgacatccct | 360 |
| aaataatgac | tggtgtaata | gtaataaatt | aaata | | | 395 |
| <210> <211> <212> | 5101 445 DNA | | | | | |

| <213> | Glycine max | |
|--|---|--|
| <223> <400> | unsure at all n locations 5101 | |
| ctgcagctta | ttetttntae tettgtgeea agtetttgat geeacatggt tgaattattg | 60 |
| acagcctccg | taattgctac catatcctca tctacaatca tgtaaagaga tcctcacttt | 120 |
| tttccacgag | ccccaacgag attgcctttt gttaccttcc aagctccatc tccaaaagtg | 180 |
| gtgtgatgcc | cctcatcatc ctaccatcct atagatatta aattttttt taaggcagga | 240 |
| atatgtctaa | cattgtgcaa tgtccatagg gatccactag aggtcttgat gttgatatca | 300 |
| ctntttccaa | caatgtcaag agattntcca tctgcaaggg aaactttccc aaatcttccc | 360 |
| gaaatatagt | tagacaataa atctatagag ggagtagtgt ggaatgaggc acctaagtco | 420 |
| attaatcatg | aatcaacggg actat | 445 |
| <210> <211> <212> <213> | 5102 358 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5102 | |
| | | |
| ggacagtgga | agagctactt tgctaaaatc tcttataaag cgcctgtata atcctgcato | , 60 |
| | agagctactt tgctaaaatc tcttataaag cgcctgtata atcctgcato | |
| agtaagataa | | a 120 |
| agtaagataa aaattttgca | gatcgcacct ctcacacgca agaggggtaa tgcaattgtg aaataacaa | 120 2 180 |
| agtaagataa aaattttgca ttgctcaacc | gatcgcacct ctcacacgca agaggggtaa tgcaattgtg aaataacaaa | 120 2 180 2 240 |
| agtaagataa aaattttgca ttgctcaacc attcaaaacc | gatcgcacct ctcacacgca agaggggtaa tgcaattgtg aaataacaaa ggatctactt caatgccctt attggaaata atgtggccta aaactataca ataaaaatgac atttttcata atctagaaca aggttagttt cagtgcatc | 120 2 180 2 240 |
| agtaagataa aaattttgca ttgctcaacc attcaaaacc | gatcgcacct ctcacacgca agaggggtaa tgcaattgtg aaataacaaa ggatctactt caatgccctt attggaaata atgtggccta aaactataca ataaaatgac atttttcata atctagaaca aggttagttt cagtgcatca ttttccagac tatccagaca aatatcagaa gagtatccat atacagtgaa | 120 180 2 180 2 240 4 300 |
| agtaagataa aaattttgca ttgctcaacc attcaaaacc atcatccata <210> <211> <212> | gatcgcacct ctcacacgca agaggggtaa tgcaattgtg aaataacaaa ggatctactt caatgccctt attggaaata atgtggccta aaactataca ataaaaatgac atttttcata atctagaaca aggttagttt cagtgcatca ttttccagac tatccagaca aatatcagaa gagtatccat atacagtgaa aacacctcta tgcaattttc tcaaaaaatca ctatnaatac taatcatg 5103 305 DNA | 120 180 2 180 2 240 4 300 |
| agtaagataa aaattttgca ttgctcaacc attcaaaacc atcatccata <210> <211> <212> <213> <400> | gatcgcacct ctcacacgca agaggggtaa tgcaattgtg aaataacaaa ggatctactt caatgccctt attggaaata atgtggccta aaactataca ataaaaatgac atttttcata atctagaaca aggttagttt cagtgcatca ttttccagac tatccagaca aatatcagaa gagtatccat atacagtgaa aacacctcta tgcaattttc tcaaaaaatca ctatnaatac taatcatg 5103 305 DNA Glycine max unsure at all n locations | 120 180 2 180 2 240 3 300 358 |

| cttcctagaa | tacattgaca | aatactttaa | ttataagttg | atttattta | tatagtaagt | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tagcaaaaat | gcttgaaatg | gtgtaaggtt | gattaanagg | agacaatgtg | tcaataaaat | 240 |
| ttctaaatct | agcttatctt | ccactaaatt | ttggtgtttg | ccttgttaca | atagaaagtc | 300 |
| gtaca | | | | | | 305 |
| <210> <211> <212> <213> | 5104 383 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttccttn | taatgcatca | caccacgtgt | gccanattac | tttccaagtg | atggacataa | 60 |
| atcctgccta | cagctgctta | ttaggttggc | cttgaattca | ttcggttggg | gtgctccctt | 120 |
| caatgctaca | ccaaaagttg | aaatttatgg | tggaagggca | attgattatt | gtctctgggg | 180 |
| aagaagacat | tcttgtgagt | tgtccttctt | ctacgcccta | tgtggaggcc | acgaaggagt | 240 |
| ccttggaaat | gtcctttcaa | gcattagaag | tggtgagcaa | tgcttacatg | gagtctctct | 300 |
| cggtacaacc | atgctcatct | ggtgccatat | tgatggtagc | tcgggtgatg | ttgggtcatg | 360 |
| gatatgagcc | tgaaatgggt | ttc | | | | 383 |
| <210><211><212><213> | 5105 374 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttgatgt | cattcanaag | acactatgtc | gacctanatg | acgactaaac | atgcattntt | 60 |
| tatgtaattg | tattcattat | gcgatataat | ttgttgtaac | caattactaa | ccaattaata | 120 |
| ttattaagta | ctcgtttggt | taagcaaaaa | aattgttggt | ccaacaaaaa | tcatttacgc | 180 |
| gtgtagcata | catcattgtc | ataattgaca | acacataatg | acatgcatgc | gtattaaagt | 240 |
| ttgagttgag | gaccaacaaa | gaactgctga | aggtgttagt | acaatctaac | tactggaaaa | 300 |
| aatatggacc | aatagaaatt | ntagctgtct | ttactaaata | tgttgtgaaa | atcgaaaacg | 360 |
| atgtcattgg | паса | | | | | 374 |

| <210> <211> <212> <213> | 5106 409 DNA Glycine max | |
|-------------------------|---|-----|
| <223> <400> | unsure at all n locations 5106 | |
| agcttagatt | tatcaagttn tattntgagt gtgggagggg gtagaatatc atccacacca | 60 |
| ctcaatattc | aagtgaaaag accaagagaa aagaanaagg aggcgaaaga acatttgagc | 120 |
| ctcttaaaat | tcttcaaatt agttagaaca tattgattag tgtttgaagg aaaaagttga | 180 |
| gaattatgtc | agcatcaaca taagttgaat gcctnctgat actgcatcaa ggatacttga | 240 |
| caacagactt | agaaccatac cacttaagct tcaactgttt ccataacatg agttaataat | 300 |
| caagaaggta | aattaagttg agtggtgaaa tgatgaaata gatagata | 360 |
| caaacatgtc | atcaagtatc aaagggtctc cactgtaata tgcatcacg | 409 |
| | 5107 337 DNA Glycine max unsure at all n locations 5107 | |
| | gatgttntgg cttttacatg cccaactcct ttgagtggca tttgtatcgg | 60 |
| | tattgttgta tcttagtaca ttagatatct attntgcatt gtgcaccatc | 120 |
| | tgtgtgtgaa gaaaattttc taagttagaa aaatttcttc aaaggaaaaa | 180 |
| | aatcgattat agaggtgttg taatcgatta caacaagcta tttgaagctt | 240 |
| | gtctcgtatc ggtttaattg attacaatag tactttaatc gattaccact | 300 |
| | caatgactga ttntttcang agtctct | 337 |
| <210> <211> <212> <213> | 5108 269 DNA Glycine max unsure at all n locations | |
| <400> | 5108 | |

| agcttgagat | gaggaagtgt | agaagggtga | aacttcctgc | ttttattcgt | tgaccacaga | 60 |
|-------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| gtggtacctg | gagatatgtc | ngcggggtca | ggagaccttg | nggacgtcag | gtggggtgct | 120 |
| atagcccaaa | accaagcttg | accaatcccg | acccaacccg | ggcatagtcg | gtcagtgaga | 180 |
| acctgtgatg | tacctataca | ggcgagctcc | tggcagtcaa | cagataanag | gaacaaagac | 240 |
| cacccagcaa | ggagacttgt | gtggtggct | | | | 269 |
| <210> <211> <212> <213> <400> | 5109 362 DNA Glycine max | × | | | | |
| | | | | | | |
| agcttatcaa | ggttgcttaa | tatctccaac | atatttactg | caattaatcc | ataatattta | 60 |
| taattagctg | acagtcggat | catgctgata | tatatcaata | agttaaattt | gatagtgata | 120 |
| ctgttgtata | tattaaacta | cattgagatt | tggcaaaagc | aaaaagctat | taaacattgt | 180 |
| cttgtgttgc | attctcattc | aggaaacagg | tttcaacttc | tgtacaaaac | agaaatttct | 240 |
| tacaataaaa | gaagacggct | tctgttcaaa | attgcctcat | ctgatctgtc | tgtgtctcca | 300 |
| ttagcatgat | ttacaggtca | ttcaagtgac | acgtgacagt | taggaactca | tccttcttac | 360 |
| at | | | | | | 362 |
| <210> <211> <212> <213> | 5110 441 DNA Glycine ma: | x all n locat: | ions | | | |
| <223> <400> | 5110 | all n locat. | IONS | | | |
| atctctgagt | cacctgcggc | atgcaagctt | gctcgagata | atagctcana | cttaggaatc | 60 |
| cagganagcc | ccatctttaa | agttctaatt | aaggttagat | taagaatttt | aaatgcaaat | 120 |
| tacattatta | taagtaatat | tgaataccta | attaaattat | attttttaag | gaacctaaat | 180 |
| aatctaatta | gatttattct | atttaatttt | aattaatatt | cattagttaa | agttgatctt | 240 |
| agttgattgg | ataattaaaa | ttagtttcaa | gtgagaataa | ggacttacat | tntttgttta | 300 |
| agttaaaatc | attctanatt | actatgcttg | gagaacctga | aataactaat | taatacatnt | 360 |
| tttatgaatt | aaatanacca | cacttatant | tctattaaat | ttgagttaac | tttttttaag | 420 |

| agaaatttga | gttactaagt a | 441 |
|-------------------------|--|-----|
| <210> <211> <212> <213> | 5111 423 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5111 | |
| cttcggcatt | acatttaaac tcgatccatt gtcgataagc acctttgcga caacatggtc | 60 |
| catacacttt | accgacacat gaagageett gttgtgteet eteceeteta egggaatete | 120 |
| ttcttccgca | nacgcgatat aattgttggt ggttatatga ttaacgatgc cttcaaaacc | 180 |
| ctccactgag | atatcgtggg ctacatgggc atcattgagg acttttatca acagcgtacg | 240 |
| atgaggctcg | aagtttatga gcagttcaag caacgagatc cttgctggag ttntattgag | 300 |
| ttgctcgact | accttaaact cgctttgtta gatgaggcga angaactcat ggngctcttc | 360 |
| caaagtcacc | gtcttttctt gaagaccttt ttctttcacc cctctaccac tggggatcta | 420 |
| ctt | | 423 |
| <210> <211> <212> <213> | 5112 381 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5112 | |
| tctaacacct | aattattcat acacaccctt agcaactatt ccaattntta ttagttaatg | 60 |
| tataattagg | ctggtttgtc catcggatta tataacaaat tgacaaacga gggataaaca | 120 |
| ttaagttaaa | taatattttc tcagattttt ttccaattaa tcttggtaga gaaatgttaa | 180 |
| taaatttctc | actttccacc tagctcctat cctaccatag ttntttttt cttttctgga | 240 |
| gttggtttgc | tttttactga tatacttgcc ctaatattag acattgacac tcttgttttt | 300 |
| caaagcgata | aagtatgtgc atgttaccca actacaagtg aaaaccaatc tcantgcaat | 360 |
| atgaatgaac | taacatttcc t | 381 |
| | | |
| <210> <211> | 5113 285 | |

| <212> <213> | DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5113 | • |
| tattatgagc | ctctcttggt atttattttg attgggtacc ataatgggat gtttttacac | 60 |
| ttcctttgaa | aaaactttga aaatgagatg ttgtaaaagt tattctttta taaaattgat | 120 |
| attgttgttg | ttaccttagt tgaaccccaa tcacattggt gtgatcagaa atttanaatg | 180 |
| acttctcttt | gatgtagacc ccaaaacacc ccttattccc tttataatgt ngaatgggat | 240 |
| ttgaccccga | atgttgatac taacctttgt cttgaaatgt atacc | 285 |
| <210> <211> <212> <213> | 5114 404 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5114 | |
| gcttgctaac | ccatggaagc tcctaatatc ttccacactn tnntgggtgg gccattcgtg | 60 |
| gatggccttg | atttcccaag gtccacatgg accccatttc taccaactac aaaacctaag | 120 |
| aaaactatat | tatctacaca aaaggtacac ttctctatat ttgcatagag ggtgtttttc | 180 |
| ctatggactg | aaagaactta cctgagatgt cctaagtgat catctangct cctattgtac | 240 |
| actanaatat | catcaaaata aacaactaca aatctaccta tgatatccct taagacatga | 300 |
| tgcataagcc | tcataaaggt gcttggtgca ttagtgagcc caaaaggtgg tcttgaaagc | 360 |
| gattttcact | cataccettn teatetgatt teggatacea ettt | 404 |
| <210> <211> <212> <213> | 5115 366 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5115 | |
| agcttatgag | cgaattetga teagaaagga ttgttgtgea eaacagagga agetaattaa | 60 |
| gaaatcctat | gatgcaaagg cccaactctt ggaggtatgg atttattttt aataattgtg | 120 |
| gtatactcac | cctttttgag gtttatataa aaggagatta ggagaatgag agattataat | 180 |

| gtgattctac | aaacatccat | gaacaacgct | accgataatt | gattgtatat | ggattggatt | 240 |
|----------------|------------------|--------------|-------------|------------|------------|-----|
| | | | | | | 300 |
| ttcaaacatc | catgaacaac | gctactgata | attgttatat | acatactatt | aatttaatta | 300 |
| caaccacctg | taacatgccc | tccaacattc | cctgatctat | atacaanaat | aattattcaa | 360 |
| gcttaa | | | | | | 366 |
| | | | | | | |
| | 5116 | | | | | |
| | 596 DNA | | | | | |
| - | Glycine max | ζ. | | | | |
| | | | | | | |
| | unsure at a 5116 | all n locati | ions | | | |
| | | | | | | |
| cacttccacc | ctcgattcgt | gatcggtgat | gatatcgact | gtacnctcca | ttccaccact | 60 |
| gtttgaccct | gtgagcaccg | tggatcctca | tagacgacct | ggcagcatgc | cagctcgang | 120 |
| aatatgggga | cccccatat | gttggnacta | cagcggcgaa | cgggcagaag | gagcaaatcg | 180 |
| acgtttcagc | atcacaaagc | acgcatggac | tcaccattca | caaacggccc | gacccacgtg | 240 |
| ggctcacgaa | ctaccacaaa | cacatttcct | cagatctttc | aacaccgagg | cccgatcgag | 300 |
| acctgctagc | atccacctca | cttctgcact | agcatacttc | atcaccaagc | tctatcataa | 360 |
| actacaggac | agggcagacg | cacaaatgtc | ttgcctgaca | caaatcaaga | ccacgacgtt | 420 |
| cgtgactctc | atacccgaag | agcatgcgct | tcgcaccaaa | tctgtcactg | gtggaccgac | 480 |
| tcactgcttt | aacggtgagc | ccccagtcct | tatgattaca | ctttgagccg | ggggatcagg | 540 |
| tcggaatgtg | cccaaaacca | atatgaacta | ccgttttccg | tgcagatgca | tgaacg | 596 |
| | | | | | | |
| <210> | 5117 | | | | | |
| <211> <212> | 434 DNA | | | | | |
| <213> | Glycine ma: | x | | | | |
| | - | | | | | |
| <223> <400> | unsure at 5117 | all n locat | ions | | | |
| | | | ++ >+ ~+++~ | tastasass | nagttgaaga | 60 |
| | | | | tgatgacaaa | | |
| gaatgatttc | aagattgagt | caacacattc | aagatcaaga | ttaatttcaa | gtttcatgag | 120 |
| aagattcaag | attcaagaaa | agtttgattt | taagattcaa | gagaagatga | attcacaatt | 180 |
| caagggaaga | aatcaagaag | acttcataag | ggaattattg | ataagatttt | tcaaaaaaca | 240 |

| aacatagcac | agtttcgttt | ttcaaaagag | ttgttctcan | aattttctaa | gttaccagag | 300 |
|----------------------------------|----------------------------------|--------------|--------------|--------------|--------------|-----|
| tttttactct | cttggtaatc | gatatcaatt | acctataatc | gattaccaat | ggccaagttt | 360 |
| aattttcaaa | acttttaact | ggaatttgca | cgtctcacat | gttncttaaa | tgatgtaatc | 420 |
| gattacaata | tatt | | | | | 434 |
| <210> <211> <212> <213> | 5118 301 DNA Glycine ma | x | ÷ | | | |
| <400> | 5118 | | | | | |
| gcattatggt | tcacagccaa | tgtgtcccac | aattgacgaa | aggaattggg | tggagatgat | 60 |
| atgaggtaaa | caaaccacag | ccacaggata | ttgtataaca | aagcaataaa | taaaaactgc | 120 |
| tacagaaata | aaaatataac | tttcaagaat | aagcacagtt | tatgtgtgtt | gttgcttaag | 180 |
| ctacatgtca | tatacaagta | tggcatatca | ttagaagatg | gaaatacata | ggaaaagggt | 240 |
| gatctactga | tgaatgctct | cctacaacct | atggtttgca | tcctacgaaa | acacatgaat | 300 |
| t | | | | | | 301 |
| | | | | | | |
| <210> <211> | 5119 444 | | | | | |
| <212> <213> | DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5119 | all n locat | ions | | | |
| agcttttnga | atttnntttt | tattttacta | ttttanaatt | cagaataact | attattttcc | 60 |
| gtcttttaat | taatttacaa | gtgaattttc | aatactaaag | taatggttca | tacttcttaa | 120 |
| tctaacaact | attntgatac | attattattt | tttattttac | gaaaattaca | aacaacaaag | 180 |
| attaattaaa | aattagaaga | catataaaca | agttgcatag | , aaaaataata | cggtagattn | 240 |
| tacaaaagtt | taaactgttt | gacacttctt | atttactttc | acacataaat | acaacaaaaa | 300 |
| tgtgtattat | cttgaaaatg | g attacaagta | tgacaactta | acataagtto | , tctatcacat | 360 |
| taatacaaat | . cggaatacct | : aagaagtata | ı taagaaatga | a taaattaatt | ttcacaagag | 420 |
| ttcctctcag | , tgtcaccaca | a agca | | | | 444 |

| <210> <211> <212> <213> | 5120 426 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5120 | |
| ctggcaaggg | tttgggcagt gtattttgag ctctaccaga tgggactcaa ttagcagtga | 60 |
| agaagttgga | aggtattgga caagggaaga aagaattcag ggccgaagtt agcatcattg | 120 |
| gaagcattca | tcatcttcat ttggttaggc ttaggggatt ctgtgctgat ggaactcata | 180 |
| ggctccttgc | ttatgagtac ttgtctaatg gctccttgga taaatggata ttcaagaaaa | 240 |
| acaaaggtga | gtttctgttg gattgcgata ctangttcaa tatagctctg ggaacagcac | 300 |
| aaggacttgc | ttaccttcat gaagattgcg actctaagat tgttcattgt gacatcaagc | 360 |
| ccggaaaacg | tgcttctgga tgaccacttc atgcgcatgg ttcggatttc gactggctaa | 420 |
| ctcatg | | 426 |
| <210> <211> <212> <213> | 5121 433 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5121 | |
| agcttggaga | ggatgcttca atggaggaaa atattgaggg agagaaagag agaggnggga | 60 |
| gcacgaaatt | gaaggaagaa aaagggagag aagttgaact ctgatttgtg tctcacaaga | 120 |
| ctctcattca | tcaaagttac aacaagtgtt acacatgctt ctatttatag actaggtagc | 180 |
| ttccttgaga | agctttattg agaaaacttc cttgagaagc ttctttgaga aaacttcctt | 240 |
| gagaagctag | agettageta cacacacece teteataaet aageteaeet eettgagaag | 300 |
| cttccttaag | aatatteett aagaagetag agettageta cacatacete tetaataget | 360 |
| aagctcacct | nettgagatg agaagetaga gettagetae acaneceeta taatagetaa | 420 |
| gctcacccnc | e atg | 433 |
| <210> <211> <212> <213> | 5122 457 DNA Glycine max | |

| | unsure at all n locations 5122 | |
|-------------------------------------|---|-----|
| agcttcgggc | tgctcaattg ctccaggttg ctgtatggaa gggctaaggt ctgtatggtg | 60 |
| gtcagcagag | gagcacaaac cgcagaccct tgcgacaggt acagattttt ggttcaaggc | 120 |
| cagctgggtt | accaagttaa ccaatgcgtc cagtttgcct tcaagcttct tagtttcaga | 180 |
| tgatgcagct | gagtttgtag ctacctcatg cactcctcta atgactatcg catcatttct | 240 |
| ggcactaaac | tgctaggagt tggaagccat cttctcaatt aaatttctgg cttcagcagg | 300 |
| agtcatgtct | ccaagggctc caccactggc agcatctatc atacttctct ccatattact | 360 |
| gagtccttca | taaaaatatt ggagaagacg ctgctccgaa atctgatggt gagagcaact | 420 |
| ggcacatagt | tntttatatc tcttccaata ctcatac | 457 |
| <210> <211> <212> <213> <223> <400> | 5123 359 DNA Glycine max unsure at all n locations 5123 | |
| | ttcaaagatc aagaanaact tcatgataac caagatgatg atctcaagaa | 60 |
| | agttcaagat gttcaagatt gaatcaagaa cactttcagg ctcaagagga | 120 |
| • | ccagaatcaa gaatcaagat tccaggttca agcttcccag aatcaagatc | 180 |
| | actcaagatt caagaatcaa gataagtatg agcaagtttt tcacaaacta | 240 |
| | ggatgttttt caaacttgtt accaaagagt tttactctct ggaatcgata | 300 |
| | tatcgattac tatagcaaat gttttgaaag attcactgat ttacacgtt | 359 |
| | | |
| <210> <211> <212> <213> | 5124 367 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5124 | |
| ttgtaatgga | tatgattctc tctatttnat atggntaaac attagacttt gaatgtatca | 60 |
| ttcaacgagt | gcaaaaacca acttatttaa aatcaaatgt ggactatcgt ccaatgctag | 120 |

| taaaacagag | ttttcaaaaa | ggtcttcaag | tgcagacttg | tgcaacaaag | tgtatcaaaa | 180 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tcaacacata | agaatactaa | tcaagtagct | ttagagagaa | gtagaaacac | tgggatttat | 240 |
| accaattcac | tcaaacaaag | ctatgtctag | ttttcctttg | cacatcagta | aagggttcta | 300 |
| ctaatcaaaa | cttgaataca | acaagcttat | gtaccaaaag | cgagtatttt | acagcctcta | 360 |
| ggcattg | | | | | | 367 |
| <210> <211> <212> <213> | 5125 399 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | • | | |
| agcttctgga | ggaagcctct | taatgaagct | tctatagaaa | gatacatgaa | gcttcctcaa | 60 |
| taaaaacgct | gccccgtctt | cgttaaccga | tggatcttct | cgaaatttgg | tcttcaactt | 120 |
| cacaagacac | ttgtgcatga | tctaacggat | ctttgagaag | atgtctggag | tgtgctagaa | 180 |
| gcttccgttt | ccgagagcat | ctcttattta | agcatttcag | cctttgcttt | cgtgtagctt | 240 |
| aagaaaaacg | tcatttcttc | ttctttcttt | cttccanagc | catttctaaa | gttccaagaa | 300 |
| ctttctccat | cacccacagc | caccattagc | caccacanat | catcattgtt | ctccattgaa | 360 |
| nacccacacc | gagaggaacc | cttcaccgaa | cggaatctt | | | 399 |
| <210> <211> <212> <213> | 5126 350 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at a 5126 | all n locat | ions | | | |
| agctntgagc | aaattcaaac | gacaataact | tttgaatcgg | atttccgact | ttgtctcata | 60 |
| gaatatcgag | acactcgtaa | ttgaaaacgg | aagttctgag | aaaaatcaaa | cgacaataag | 120 |
| ttttaactcg | gatgtcctat | tgagccctgt | catatatcga | gacgctcgta | attgaagacc | 180 |
| gcagctctga | caaaaatcaa | acgactataa | tctgtaactc | ggatgtgcga | tagagacccg | 240 |
| taatatatcc | ggactctcat | aattgaaaac | taaagctctt | aacaaatatc | aacgactata | 300 |
| caatcttgac | tcggatgtcc | gactgtgtcc | cgcaagatat | acagacgctc | | 350 |

| <210> <211> <212> <213> | 5127 455 DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 5127 | |
| agcttagtaa | agctaggcac taacaagaat atgtgaactc ttagaatgtt tatataagac | 60 |
| aattaatcca | gggttagagg gattcggcaa gtaccaatnt gtctccacaa tggtcaattc | 120 |
| ctcaattgat | aaaaatccaa attgagaaag atttaatcct ttttcttgga aaattaaaat | 180 |
| attttttatg | agacaaggat acgaacatag aatcatgtaa ttgattttct ataaagcacc | 240 |
| tatccccaat | caactaaaaa tggctaaatc acttanaagg aagaattata tacgcaaaat | 300 |
| atttggttaa | atatattgaa aacttcaata aattttcaac tacatctctt tctttaacca | 360 |
| caaccaacat | aattgagtgg aatatcaaac anaggctgca caactttcac caactacatc | 420 |
| aactctttt | acaacttctt ttccacttat attac | 455 |
| <210> <211> <212> <213> <223> <400> | 5128 320 DNA Glycine max unsure at all n locations 5128 | |
| agcatgcaag | cttatagnaa tacagcaccc ttttatttct ggatataaca atcctccccg | 60 |
| ggggaagaac | ttcatgtatc atataaacac ccctttaata taaccgatat caaaatgaga | 120 |
| taggtaacct | tttctttggt aaattcctat cttttgggcg ttgtagggga agccaaaact | 180 |
| ccttcctacc | acgtacttct aaacaacgga gccaacgctt atattaacaa aaaaatacta | 240 |
| atatattaat | attaaaaaat atgcttttta tcttcttgac tctgaaggtt actagctagt | 300 |
| attattcaat | cacttacgaa | 320 |
| <210> <211> <212> <213> | 5129 451 DNA Glycine max unsure at all n locations | |
| <400> | 5129 | |

| agctntgagc | cgaaatcctg | actcaccata | atccttaccc | tcggaagcaa | aaaaaggaga | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agaaaaatct | ccaatcacag | gaaaaaagac | tagacagaaa | attcccaatc | aaagaatggg | 120 |
| agaaagaaaa | aaagagaaat | aaaaaagacg | atagctcctg | gtcaaagaaa | ccagaagaaa | 180 |
| tgtgtcggga | ggtccttgga | ccagacgata | tctgaacaat | gcagaattgt | caccaaatga | 240 |
| acaaaagaaa | gaaaaggaaa | ccatgaccta | caagtggtct | tctccctttg | attaccaacc | 300 |
| aaaatcctgt | gcgctagcga | ctntttcgcc | ccgcactaaa | caaaaataga | aaaggaaaaa | 360 |
| gccaaccata | aatcataagc | caaaacacac | aaaagctcaa | aaaacccatc | agaagagcgc | 420 |
| attctcaaga | gaagtcctat | tgatccatga | t | | | 451 |
| <210> <211> <212> <213> | 5130 349 DNA Glycine max | × | | | | |
| <400> | 5130 | | | | | |
| agcttcattc | ttgtatacag | attagaagct | ttttatcaat | ggtctctgca | aataccttat | 60 |
| gtgcagaatg | aaattctatc | aatacacctc | caatctttac | tggagagggc | taccactact | 120 |
| ggataacccg | aatgcatatt | tttattgatg | caatagactt | aagtcttcgc | gaagccgtag | 180 |
| aaaaatggcc | atatataccc | accacactaa | taacaactac | atcagatggc | agctcatctc | 240 |
| gtgaaagcat | aacaatagaa | caacctatac | atacatgccc | cgcacatgat | ataagatcat | 300 |
| gtcactccat | ctaaatccca | cataataatc | acatctgccc | tggaatggt | | 349 |
| <210> <211> <212> <213> | 5131 604 DNA Glycine ma | x | | | · | |
| <223> <400> | unsure at 5131 | all n locat: | ions | | | |
| cggtacatcc | atcgtacatg | tgtcggtgtg | attaatgaat | cgaatanaaa | aangatcgnn | 60 |
| nnncaatggc | aaagaganat | ggaccctgta | gnaccangcg | acctctnaga | cgacctgccg | 120 |
| antannaat | tagataatta | ttatasasas | taatcttatt | ttattqcqta | gaatactacc | 180 |

atacgatatg aatgcatcac agaacttggt caaaatatgc actatggatg tgactttgct 240

| taaataacaa | tttgaaagga | tatgatattt | atttcttaaa | caataacgct | gaatatccag | 300 |
|-------------------------|----------------------------------|--------------|------------|------------|------------|-----|
| acgatcttct | ttttaaaact | aaaaaaatag | caaaaatccc | tccttgacat | ttcgatgagg | 360 |
| catatntctc | catcaaatcc | ataataacaa | atcatcaatt | caannttgct | catgggcatc | 420 |
| atgagtatat | ntttacaacc | tgtatatttt | ctgcttgacg | atgtgcataa | caatattaag | 480 |
| actatgactt | cgagaatcta | attccttaaa | gacaaccatg | tgcgatatct | ctctaagaat | 540 |
| gaccatcacg | gattacggtg | aggaatgatt | ctatatccac | accacccacc | taattttcgt | 600 |
| aatt | | | | | | 604 |
| <210> <211> | 5132 433 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <223> <400> | unsure at a 5132 | all n locat: | ions | | | |
| tcttttacga | ttaataagac | gggagaagaa | agacgcctag | ctgacagaaa | tcacgttaca | 60 |
| cgctcccaat | gctaacaaca | ttatagacat | cggatatcgt | actcggctcg | ccatcatcgc | 120 |
| catggtcaaa | aacgccagag | gcaaatggcc | agaatactcc | gactacactg | atctgaacac | 180 |
| ggcgggccct | aaacatgaat | acactctgct | caacatccaa | naactgtgga | acgcatgcct | 240 |
| tccaagatca | ctttggtgac | gcccaagaat | cacgcgcaaa | caagctccaa | catcaagatc | 300 |
| acattcaaca | ttcaggaaag | ttccagactc | agagtacgac | tcaaagacga | ctaaccacat | 360 |
| cacctcggag | agcttcacaa | catgaacaca | aagagtattc | gaaacaaaac | cttaccacga | 420 |
| gggtacctct | ggg | | | | | 433 |
| <210> <211> <212> <213> | 5133 559 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5133 | all n locat | ions | : | | |
| acaactcaca | acttcagtcc | ttgtatgacg | tgcatcgtat | anatnccacc | canaaggccg | 60 |
| agctttggct | cgtgacgcaa | cttaattacc | gcggctgcag | ccttacacgg | atgaaacatg | 120 |

acctattatg tececacace gaetttgete teagaegteg etgtaegtee acaaccacta 180

| catcgatcat | aacaggaccc | ctcccttgaa | tgttagaata | caccgctcat | gcgtatataa | 240 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| caacagacgg | gatagataat | gtatcgacta | cgcacatgtc | gaacaatctc | gccgagatgg | 300 |
| ggtccatatc | aacgtcgagt | taacgaaaac | cacgccgagg | cgaggtacta | ttcaacgcca | 360 |
| ggtacgtcca | acacacctng | ttggtgggta | tccttataac | gaacgacgcg | gcgccaccat | 420 |
| caacgttggt | tgagaactcg | tcacccctga | ggtagcacac | cgcctgtgtg | cttgaagtta | 480 |
| accacagcac | catgctccca | tgtcgcagta | aaaaactaaa | accgggtcta | aatgaccgag | 540 |
| atgtacaatc | ccctcccc | | | | | 559 |
| <210> <211> <212> <213> | 5134 316 DNA Glycine max | k all n locati | ions | | | |
| <400> | 5134 | | | | | |
| ggctgcagct | ttactngttt | tctattaagt | tcatttatca | cattcacaag | tgtttagata | 60 |
| tattttgttt | ttatagaaaa | ttgatttaag | cttatttgga | taatctcgcg | ctaatacctt | 120 |
| actttactaa | acttagagcc | aaattaagac | tgtggtagac | gacctttaat | ttgatcaatt | 180 |
| tcaagcgctt | tgccttggct | gtttttgaat | aggatccata | tttgacaaaa | ggtctaaagn | 240 |
| tgtcactaac | aacatctatt | cactcagtcc | tcttagtatg | gtctatatat | tttaggtgac | 300 |
| taactatgat | gcaagt | | | | | 316 |
| <210> <211> <212> <213> | 5135 594 DNA Glycine max | | iona | | | |
| <223> <400> | 5135 | all n locat: | ions | | | |
| tgtcttctag | ccctctcacg | ctgtcacctt | atacacgctt | aatangactt | atctcacttt | 60 |
| anancaacnc | cntacgccca | gatgggatgt | ggacccgatt | gagcacccgg | tgatnctcta | 120 |
| nagacacact | gcagggctgc | atgcctntat | atgagctgaa | ccatttatct | atttacacac | 180 |
| tctgaagcgc | tatccacaag | actaagatta | tcccttctat | cttactgaga | gtgattctcc | 240 |
| taacttcctg | agtgaatcaa | gaacaccctg | cctgatcaca | tgacttccct | acccttgtgt | 300 |

| gggccctcgc | tggaaagaat | gatcctttgc | ttcctatcat | ctccaccctt | gttctttcga | 360 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| accatcattc | cagataatcc | acctccgccc | agaattattt | tgcgaccata | ctcccacttt | 420 |
| cacgctcaac | taacggattc | ctgaccgtaa | tataagtcat | cacatgactt | tcgctcggtc | 480 |
| ggatcacgta | tctggagccc | tgaacatcgg | tattgcgtct | atattctgcc | agccaccctt | 540 |
| acctcccctt | accagcccgt | catccatgtt | nccacaacca | cccattagac | cacc | 594 |
| <210> <211> <212> <213> | 5136 284 DNA Glycine max | ζ | | | | |
| <400> | 5136 | | | | | |
| agcttgatat | taataaccta | tttggctcag | ttcgagttct | gactatagct | gcaaactatc | 60 |
| tcatgttggt | gttcagtgta | ccacaccctg | tgtataacat | ctcatatttt | gcattggatt | 120 |
| cgattaatga | tacacaattt | gtttattcga | gaaaaaggtc | ccatccttca | atttcatttt | 180 |
| gcgatatttg | acagcaccgc | aatttcgttc | tgaaacggta | actatcagct | ccggtaccgt | 240 |
| gttgttgcag | atgatatttc | cgttactgaa | cgatttttat | aacc | | 284 |
| <210> <211> <212> <213> | 5137 438 DNA Glycine max | κ all n locat: | ions | | | |
| <400> | 5137 | | | | | |
| agctnttcct | aatgttccca | cttcatacgt | attatctgga | atgcagagaa | ggttggccac | 60 |
| atcgacatta | ttgaattcat | gttgcctagt | cattctctag | taggtgtccc | taccatcttc | 120 |
| tgggagagta | gtgggctctc | ctaaatactt | gttgatggta | tctctgtcat | atttcacttg | 180 |
| aactcttctc | acctaagaaa | ccttagtgat | ctcatgttgc | tttgttggcc | aggaatttgc | 240 |
| ataaaatcct | ctaactatat | cttcattgaa | ttttgtttca | agctctgcca | gaattttcca | 300 |
| tctttcttt | gtgatgctag | cctgaaactc | ttcatattgc | catgtcttaa | ggtctacttt | 360 |
| ttctcacgga | ttangcttct | ggactctatt | tctacatatc | ttttgtggtt | ggattngtac | 420 |
| | | | | | | |

| <210> <211> <212> <213> | 5138 178 DNA Glycine max | ¢ . | | | | |
|-------------------------------------|--|-------------|------------|------------|------------|-----|
| <400> | 5138 | | | | | |
| gttaaaccta | tctcagaatg | aaatctgtta | catttgtgca | ataccatatt | gttattactt | 60 |
| gagccattct | agtttatact | cattcttgaa | tcataatcaa | atatgacgat | gttagtgaac | 120 |
| atcaatcaac | ttaattatat | tccttgatct | taagtttgag | cattgtgtga | gtaagtca | 178 |
| <210> <211> <212> <213> <223> <400> | 5139 420 DNA Glycine max unsure at a 5139 | | Lons | | | |
| caagctctgc | cacatgtccc | tatttgattg | gagcaaaagg | gcccactatc | tctttntgac | 60 |
| tgtgacccat | actcagtcac | caaagtgaga | aaaatctgac | ctttgaaacg | ctaaaatcct | 120 |
| gcctcggttt | gcgtgtcgtt | tctctgattc | cagttttctc | gcatttctct | gcgtccgccg | 180 |
| gggccagttt | tcgaaagcaa | gcaatatata | tatcacaacg | ctcagaatga | aaccccgagc | 240 |
| gtggattaga | gggtggtttc | gttaaaattt | aagtcgcacg | cacaacgatg | attttaacta | 300 |
| attaattagg | aattaaccca | taacctccca | gttatggatt | tcttctccta | attagcctaa | 360 |
| cacgcatatc | ttgccccgc | tatcctactt | ctaccagaac | atatangata | tacactgata | 420 |
| <210> <211> <212> <213> | 5140 346 DNA Glycine ma: | x | | · | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| tgtagagagg | cattngagga | gctgaggagg | aggcttacca | cctttcccat | catgcaacca | 60 |
| ttagattgng | agcttccatt | tgaatttatg | tgtgatgcct | ccaattatgc | acttggggat | 120 |
| gttntgtcgt | agagagttga | tagactatca | catgtcattg | cttacgcctc | accactctgg | 180 |
| atgcaaccca | agtcaactac | accaccaccg | aanaagagct | tttagctatt | atttttgcat | 240 |
| tagataaatt | cagatcttat | ttgtttgctc | ctatattact | atttgtactg | accatgcagc | 300 |

| cttgagatac | ttgttgaaga | aacctaatgc | taaacccaaa | ttgatc | | 346 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5141 392 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 5141 | ll n locati | lons | | | |
| aactggatgc | attggtttac | ttggaaccca | gctggccttg | aatcagaaat | ctgtacctgt | 60 |
| cgcaagggtt | tgtggttggt | gctcctctgc | tgaccaccat | acagaccttt | gcccttccat | 120 |
| gcagcaacct | ggagcaattg | agcagcctga | agcttatgct | gcaaatattt | acaatagacc | 180 |
| tcctcaacct | cagcagcaaa | atcaaccaca | gcagagcaat | tatgacctct | ccagcaacag | 240 |
| atacaaccct | ggatggagga | atcaccctaa | cctcagatgg | tccagccctc | agcaacaaca | 300 |
| acagcagcct | gcttcttcct | tcaaaatggt | gctgggccag | cagaccatac | atntctccac | 360 |
| caatcaacaa | cagcaacaac | cccagaaaca | ac | | | 392 |
| <210><211><212><212><213> | 5142 387 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttcanac | agcttgttat | aataaattac | aatgaggttg | taattgatta | aaacagagag | 60 |
| tgtttgcctc | tgaagaaant | tttctaactn | tgaaattttt | cttcacacat | actatgatga | 120 |
| tgcataatgc | aaaacaaata | tcaaatgcac | taagatgcaa | caaccaagat | aaaaaccaat | 180 |
| acaaatgtca | ctcaagggag | ttgggcatgt | aaaagccaaa | acttcttcaa | aacctcttca | 240 |
| agcttttcct | tgagcttcaa | gctttaccct | taggttgttc | actatattgc | ttatgttgcc | 300 |
| cccctatctc | taacnaactt | ggcacanaga | cttggaaaac | tcatattctt | tgtgagcatg | 360 |
| tcaacaaggg | aaacaaatca | naacgtc | | | | 387 |
| <210> <211> <212> <213> | 5143 523 DNA | , | | | | |

| <223> <400> | unsure at all n locations 5143 | • |
|----------------|---------------------------------------|--------------------------|
| gatgtgaccc | tatctgcccg agatcttaag tcactgcggc tg | gcagcttan agtcctagtg 60 |
| natgaattgt | gtgtgcttga attctggtga aaatgccaag ta | atagcaaaa atgaatggtg 120 |
| caatcccaat | tgtgtgatta aagagacaaa cacttgattg ca | actcgtgag tgagtgaaac 180 |
| acttgaataa | tgaggagtgt ggtcttcttg catcaatgat ga | aatcgccat gctttgtgct 240 |
| ctcctttgat | tttgagctag tgtatccttg ctatggtctc ct | caaagagga catccctgtg 300 |
| aataattgaa | gccttgttcc attcattatt ttttatagaa na | atacatgtg ttggatatcg 360 |
| taggatggaa | tcgatctcaa ctcatgtcaa tggtttaatc tt | tagcactaa tagctctcat 420 |
| ttaacgatgt | gtgtactttt gctcgaggac anaacaacgt ct | taatattga cggagttgat 480 |
| atttgccaca | atacttaact gagacatgtg attatgaaat ta | ag 523 |
| | | |
| <210> | 5144 | |
| <211> <212> | 427 DNA | |
| <212> <213> | Glycine max | |
| <213> | Grycine max | |
| <400> | 5144 | |
| agcttgcttg | g agaagettet atggaggetg gatetttgag et | ttcaatgag gaccttcaat 60 |
| ggtgattttc | c aaccatggag atgcagcgga agataaagga ga | aagtggtga gaggaggcgc 120 |
| tatccactag | g ggaataagcc atgggaggag gaacttcacc ac | ccaagagag tgccttggat 180 |
| aagaagctta | a tagaggaagc ttcagtggag gaaaaaaatg ag | gagagagag agaagggggg 240 |
| gcacgatatt | gaaggagata aagagggaga gaagttgaac t | ttgaagtat gtctcacgag 300 |
| actctcattc | c atcaaagtta tgacaagtgt tacacatgtt to | ctatttata gcctaggtca 360 |
| ctatataaat | gacagettee ttgagaaget ggagettaae to | atacacacc ccctctaata 420 |
| gctaagc | | 427 |
| | | |
| <210> | 5145 | |
| <211> | 301 | |
| | | |
| <212> . | DNA | |
| <212> | DNA Glycine max | |
| | | |
| <213> | Glycine max | |

| gcttcaccgg | atgatgccga | tcgaacattt | tctaatcgac | atcatccaat | tgttattcag | 60 |
|-------------------------|-----------------------------------|--------------|------------|---------------|------------|-----|
| ggattgaata | gaataaacaa | tggccagtgt | cggtccttat | atggccccga | ctgatatctt | 120 |
| tcagccgaca | ttgggcaatt | tcttttacaa | atggtggccg | ataatgttct | ttntttacga | 180 |
| tagaggaagt | tttttgtttt | ggtgttgcct | aaaaaattta | caacttaggt | cggctaggtt | 240 |
| tttccgtgcg | agctcanccg | agggttcgtt | ccgacggaca | ctgngcatgt | gttcttctca | 300 |
| t . | | | | | | 301 |
| <210> <211> <212> <213> | 5146 361 DNA Glycine max | × | | | | |
| | | gatttggtaa | tattgaatga | t caagt gat a | 2211211222 | 60 |
| | | gatttgctaa | | | | |
| | | gtgcatgata | | | | 120 |
| acaacaattc | ataaaaaata | ccatggttta | atttacactt | aagttctttg | gaaaattgtt | 180 |
| tccatgagga | tctcccttaa | tcttgtagaa | aataaagcta | aatactttct | aatgaacgaa | 240 |
| gcatctgaaa | cgtcaaggtg | gcgtaagtgt | tccacaccct | attgaaagag | gtaatatttt | 300 |
| ctcattagag | atccaggcac | aagcttaatt | acttttgact | catactattt | aataactttc | 360 |
| t | | | | | | 361 |
| <210> <211> <212> <213> | 5147 405 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a 5147 | all n locati | ions | | | |
| aagctcctaa | tatctcccac | actntnntgg | gtgggccatt | cttggatggc | cttgattntc | 60 |
| tcagggtcca | cttggacccc | atttctacca | actacaaaac | ctaagaaaac | tatattatct | 120 |
| acacaaaagg | tacacttctc | tatatttgca | tagagggtgg | ttttcctaag | gactgaaaga | 180 |
| acttgtctga | gatgtcctaa | gtgatcatct | aggctcctac | tatacactaa | aatatcatca | 240 |
| aaataaacaa | ctacaattct | acctatgaaa | tcccttaaga | catgatgcat | aagcctcata | 300 |

| aaggtgcttg | gtgcattagt | gagcccaaaa | ggcatcacta | gccattcata | caaaccanac | 360 |
|-------------------------|-----------------------------------|---------------|------------|------------|------------|-----|
| ttggtcttng | aaagcagttt | acactcatcn | acccțtttat | cctga | | 405 |
| <210> <211> <212> <213> | 5148 446 DNA Glycine max | ς | | | | |
| <400> | 5148 | | | | | |
| tgcaagcttt | acatttaaag | cccagaattt | tacagctact | tcatcgtgct | cttgtaaatg | 60 |
| gctgatttcc | atgcagtgat | tgaaaatcgg | atgaaagatt | ttttttctaa | tcttatgttt | 120 |
| gtaatgtgtg | agacaaatat | tacatagtac | tgttaacaag | aaattaccac | tagggcattg | 180 |
| atgttctaca | ctgtaacagc | atcatccatc | attacattgg | aatattggat | agatcatacc | 240 |
| ttgataattt | aaatctgcta | gagtgaaggc | cgaatagttc | cttgtgattt | gcctggtaac | 300 |
| ttggtatata | tagttgcatg | cattgtctaa | cacatgactt | gaattcaaca | gatgttaact | 360 |
| gtcttagcgg | gaacttttct | tggactccat | attgcttcca | tttcatatgt | acctacaagg | 420 |
| aggtcttcat | aatctcataa | ttttca | | | | 446 |
| <210> <211> <212> <213> | 5149 344 DNA Glycine max | · x | | | | |
| <400> | 5149 | | | | | |
| tcattggagg | taaagatata | aactttagat | tagacgcatt | ataaacgaaa | aacaaagaag | 60 |
| gaaagggttc | atgatattaa | taaacctgag | gaaaaagcac | ctggttagta | cggataaaaa | 120 |
| gagtagttgt | agaaatgaga | tataaaaagt | gagggaagat | catggtagag | taattaacta | 180 |
| aaccggccat | cacaaattta | gatgagagtg | gtttgaagaa | tgcagactgt | aacaaattat | 240 |
| tgggacttaa | tttgaaagaa | ggaagaagga | gacaatcgtc | gtctctttgt | ccactactcc | 300 |
| acctcagatt | tttggacatg | tctattttgå | aactacttag | taac | | 344 |
| <210> <211> <212> <213> | 5150 431 DNA Glycine max | x | | | | |

| <223> <400> | unsure at a 5150 | ll n locati | ons. | | | |
|---|---|---|--|--|--|-------------------|
| caggtatctt | tatcctacct | cacgccgcgc | tctaatgacg | atatcattat | ttctggcgct | 60 |
| gaactgctca | catttggaac | ccatcctttc | tattatactc | ctggcttcac | cacgattgac | 120 |
| tgtgtgccaa | ggctccacca | ctagtagaat | ctatcatact | accctacata | ttactgaatc | 180 |
| cttcctacat | atatgggata | aactgctgct | ataacatctg | atggcgactg | gcaacaggat | 240 |
| cttgngttta | taatatatgc | attattcata | cccgctatct | ccactagttg | acattacata | 300 |
| tatatctttt | tgatggttgg | gtctgaaacc | cgcaaaatct | tctagaatat | ctatcacgtg | 360 |
| tccctatagt | atggacctga | acaggtgtac | accgtctttg | cgtcttaaag | atgagagagc | 420 |
| ctccaacatc | С | | | | | 431 |
| <210> <211> <212> <213> <223> | 5151 419 DNA Glycine max unsure at a 5151 | | lons | | | |
| <400> | | ttasttaatt | astatastst | tatatttast | ccatgagtat | 60 |
| | ttgatcgata | | | | | 120 |
| | tgcaaatgtg | | | | | 180 |
| | tgagttatgt | | tgtatttcat | llalalyala | ggtatateta | 100 |
| tgttgtctca | | | | | | 240 |
| | | | | tcactccatg | | 240 |
| | catgtgatga | tatcgaactt | tgtgttcatg | ggagcagatg | attcagtgga | 300 |
| tggctatgga | catgtgatga | tatcgaactt | tgtgttcatg ctagaacaca | ggagcagatg | attcagtgga aggatgagac | 300 360 |
| tggctatgga | catgtgatga | tatcgaactt | tgtgttcatg ctagaacaca | ggagcagatg | attcagtgga aggatgagac | 300 |
| tggctatgga atcggaacat <210> <211> <212> <213> | catgtgatga gaacctcatg anggttctat 5152 448 DNA Glycine max unsure at a | tatcgaactt ctagaggacg ctanattaca | tgtgttcatg ctagaacaca tgaagcccta | ggagcagatg | attcagtgga aggatgagac | 300 360 |
| tggctatgga atcggaacat <210> <211> <212> <213> <400> | catgtgatga gaacctcatg anggttctat 5152 448 DNA Glycine max unsure at a 5152 | tatcgaactt ctagaggacg ctanattaca | tgtgttcatg ctagaacaca tgaagcccta | ggagcagatg atgctctgat gacatattag | attcagtgga aggatgagac nttatcatt | 300 360 419 |
| tggctatgga atcggaacat <210> <211> <212> <213> <400> gcttgaggct | catgtgatga gaacctcatg anggttctat 5152 448 DNA Glycine max unsure at a | tatcgaactt ctagaggacg ctanattaca ctanattaca | tgtgttcatg ctagaacaca tgaagcccta ions atatagagag | ggagcagatg atgctctgat gacatattag agggtggtag | attcagtgga aggatgagac nttatcatt ggtaaagttt | 300 360 |

| | | | • | | | |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| tggtcgagtt | gaattgacca | aaatggggtt | cttgcatttc | atgtgaaact | acgagtttgt | 180 |
| agtacgttct | ctcgtgaagc | cctcttgcta | gtggaacaat | ggaacctaat | tcatatttga | 240 |
| ttaccgattt | tgcccctctc | tgtcaatatc | aaactttggc | acatgagatt | gatagagaag | 300 |
| ggcaacttga | actctctctt | ttggtcgtag | agcttatggg | atgaacatcg | ttctttaaag | 360 |
| caaggtcatg | acgtgggttc | ataagcgtta | accttgattt | acaatagcat | gttaataaca | 420 |
| ataacttatc | cacagaggat | acacatat | | | | 448 |
| <210> <211> <212> <213> | 5153 459 DNA Glycine max | « all n locati | lons | | | |
| <400> | 5153 | | | | | |
| agctatgatt | caattcattc | aataacaatc | cattaatcgg | aattaataaa | tttcaccaac | 60 |
| attctgttat | aaactcaagt | caatcaggga | ggcagcccca | agcgcagtcc | atcagtattc | 120 |
| gcacaataga | caaattaagc | aaaacagtca | atccccttaa | cccagacttc | ctttccctat | 180 |
| gtgcaagctt | actttcccca | ttttacccct | tttttcatca | ttgaaagttc | actaaatctt | 240 |
| gccaaacatt | aactcttata | tggaatgagg | atgagttaat | cttagaactt | acaatagatg | 300 |
| ccccanatca | tccaaaccct | gaatcaattc | ttgatgtctc | ggtatacaaa | tatgatttgt | 360 |
| cattcgcagt | acagcattcc | aatgcccctt | cctttctgat | gcctgaatcc | acaaccttgc | 420 |
| tcaccaccat | tccaattttc | attanaacac | tctacaaca | | | 459 |
| <210> <211> <212> <213> | 5154 348 DNA Glycine max | x | | | | |
| <400> | 5154 | | | | | |
| ctacaagttg | gatgcctcgc | tatgtggatg | catctcttag | ccaatctgcc | tcgctaagcg | 60 |
| agtcattaac | aacttttacc | ttctcttctt | tggcgtgaaa | ttgagttgga | ttcaacatta | 120 |
| ggtcacaaaa | attgagtttc | tactctataa | aatcacacaa | tagagaaaat | atgtacaatc | 180 |
| | | | | | _ | |

tctacaaaaa gaaccataaa taggaggcat attgctattt tcttgcagat atccaatacc 240

| aaactaactc | atggatgatg | caatcctacc | ccccaagggt | attggataga | agactccaag | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aggcttatgc | tagagctact | aaagaaggcc | ctatggttct | catgaaca | | 348 |
| <210> <211> <212> <213> | 5155 398 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5155 | ll n locati | ions | | | |
| atattacata | gaaggaanaa | aatagagatg | gatattcaat | atatagatag | aagagaagaa | 60 |
| aacacaatca | ttttctactt | tctagttttt | ctaccaagct | agtaaaatgg | aattgtttca | 120 |
| atccacatct | ttcatagaaa | caaactaaat | ttgtcactca | gtcaatagta | aagaggatac | 180 |
| aaagtataat | ttaattgatg | acattgtcat | actgttagtc | cttcaaatgt | attattattg | 240 |
| gtgatcacgc | aaacttgttc | atcaagtggt | tccccaacac | ctcgactatc | atcatggaga | 300 |
| atacgccttg | agtagtaaac | attgtgttaa | tactctggtt | gcaataaaat | aatattgaat | 360 |
| agcattaata | aaagaaagct | cgaataccta | tgaagcat | | | 398 |
| <210> <211> <212> <213> | 5156 397 DNA Glycine max | ı. | | | | |
| <223> <400> | unsure at a 5156 | ill n locat. | ions | | | |
| ttatagaata | aattttgagc | caaaacaaca | agcacctttc | cctttcacct | tgtttttctg | 60 |
| gatactcgat | ttcctgccaa | catgtgcgat | tattcgtatt | ttttcctttt | atccaaatca | 120 |
| cttgtttctt | tntttataac | ttttttccag | atgtctagaa | aattcagtat | aaatttcagc | 180 |
| tcaaaattcg | aggtaaccaa | ttctcagtaa | ttcttacaag | tttgtatgtc | caagctgcca | 240 |
| gcaccagcga | tatgtttctt | taaacatggt | atattgattg | ccttgggctt | actctcaacc | 300 |
| ttcctatgta | tgttgaactc | actagtattg | ttgaccacaa | gtnttaggtg | ttcaatattc | 360 |
| acttaggato | aacattttag | ccagcaattc | aatcacc | | | 397 |
| <210> | 5157 | | | | | |

| <213> | Glycine max | | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <223> <400> | unsure at all 5157 | . n locati | ons | | | |
| aacttgtttg | gatgatgagt ta | ıgcaaggca | ttgtggaatg | gttcctgtca | acttgttgag | 60 |
| agataagttg | agaatctgaa to | gctcttgc | attgcaaatt | gaggaagaga | atccatcagt | 120 |
| gattgagtta | aaactaagat ca | atggttacc | aagttgcttg | ttccacgaca | attggtccaa | 180 |
| tgattggttc | aatcggttat ga | agaggtc | caattcagat | aacgatattt | catgcaacca | 240 |
| atttggcact | ttacctttaa gt | ttgttgtt | ggacanagag | agcgattcca | aac | 293 |
| <210> <211> <212> <213> | 5158 402 DNA Glycine max | | | | | |
| <223> <400> | unsure at all 5158 | l n locati | ons. | | | |
| agctttgctt | ctgttcaata ta | ataatgact | gtagctaact | atgcgtggnt | aatccgatcc | 60 |
| gatcatcgat | ggtcggcaag ta | atgatggtc | ttaatgatga | tcctacacgt | attttcgtgt | 120 |
| gtatctcaca | ggcggtttta aa | aaaacctcg | ccaattaact | tgggttacgg | gtgtagttat | 180 |
| ggctgtattg | actgcatctt nt | tggtgtaac | cggttattcc | ttaccttgtg | atcaaattgg | 240 |
| atatagngca | gtcaaaattg ta | aacaggcgt | acccgacgct | attcctgtaa | tangatcagc | 300 |
| tttggtaagc | tattacgcgg aa | agtaccagt | gcaggacaat | ctaccttaac | tcgttgttat | 360 |
| aggttgcata | cttgttgcat ac | cctcttcta | ctgctgtatt | at . | | 402 |
| <210> <211> <212> <213> | 5159 453 DNA Glycine max | | | | | |
| <223> <400> | unsure at all 5159 | l n locati | ions | | | |
| atccttaagt | cacctgcggc to | gcagctttt | atccaggcaa | ttcttggtgg | tgatgctcct | 60 |
| tcttctttgg | cttattccct ag | gtggatggt | gccttccctc | tcctcttctc | ctttgccttc | 120 |
| cactgcatct | ccatgatgta a | aatcaccat | tggaggacct | cattgaagct | caaagatcca | 180 |
| gcctccatag | aagctccaca aq | gcaagcttt | catcaaaagg | agactgtaat | agtctttata | 240 |

| acaatgaaag | tagaagacca | tgaatgtctc | tgcatgccaa | cggactcgct | tgtctctgga | 300 |
|-------------------------------------|--|-------------------|------------|------------|--------------------------|-----|
| aggcanagaa | gactgtaata | gtcttgataa | caatgaaagt | ggatgaccac | tgatgtctcc | 360 |
| tcatgccaac | ggactcgctt | gtctctagaa | gggcagggaa | actgcaatag | tcttgaaaac | 420 |
| aacaacaacg | gaagaccatg | attatctccg | cat | | | 453 |
| <210> <211> <212> <213> <223> <400> | 5160 449 DNA Glycine max unsure at a | c all n locati | Lons | | | |
| | | atgaaatttt | ggtcaatgaa | tttctctttg | ttctttgagc | 60 |
| | | | | gtcatgtact | | 120 |
| | | | | atgtactata | | 180 |
| | | | | agattttcat | | 240 |
| | | | | agttggatac | | 300 |
| | | | | atgccaccga | | 360 |
| | | | | cgttgaatgg | | 420 |
| | | | egewedeace | 0900944099 | 3 • 9 • 1 • 1 • 1 | 449 |
| Clacityaty | acatacgaga | acacecace | | | | |
| <210><211><211><212><213> | 5161 348 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5161 | all n locat | ions | | | |
| agcttagcag | aggatanggt | tataccctta | tcttatgacc | ggcggtaggg | cttgttcccg | 60 |
| aacacgaccc | aatctcctac | ttgataatgc | atctctgcga | tgtttgtgat | ctggttgttt | 120 |
| cttcatgagg | acctgggctc | tgagcagctt | cttgtgaata | gcttgaaagg | atgcatctct | 180 |
| gtcaatcaag | aggctctcga | cagcttcgat | atttgatgtg | ctggagatat | actcacggaa | 240 |
| attgaatggt | tctcggcaaa | tgtcacctcg | tagggagttg | tacccgttcc | cgcgttccac | 300 |
| gaggtgttgt | gtgaccattc | tatccatcgg | atgaacttgc | cccaccta | | 348 |

| <210> <211> <212> <213> | 5162 339 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5162 | |
| agctagcaac | aaacataatg tettgtettg ttgetgaeag atacaacaaa etaccaatta | 60 |
| tacttctata | aacaaaatca teegetttat caataceate gtteattgat aacettteat | 120 |
| tcacaacaat | tggagaggcc acacgcttgc attgctccat gcaaaacttc aatatcacca | 180 |
| aagcatattt | cttttgtgaa atgaagatcc cgtcattaca ttgagaaatc tccattctaa | 240 |
| gaaaatactt | aatttcaccc aagtcaacca tttcanattc gttgtccatg tcccttattt | 300 |
| cacctaagtc | agtcattttc ccacttcttc acgtaccag | 339 |
| <210> <211> <212> <213> | 5163 449 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5163 | |
| agctagttgg | attatggcgc acccgtcata tgtggtacta ggtggcgatc gggcgatggc | 60 |
| gcanatcaac | totoccactt ccacaaatca tacatgaacc caccateege agttgeceae | 120 |
| cttcaactga | gctcacgtac tcctacgtag cccttatcct cgttcctctc agcaccgggt | 180 |
| ccccattaac | cactccaagc ttccacaata tccaagcaat tcaattccaa ttaccatgaa | 240 |
| ctaccctaaa | ccaagagaac agggcagagg cagagaactc tgcccaaaca cattacacat | 300 |
| tacagtttcc | ttactcatat atcccagaac atttcttcgt ttcattcgta accatgaatc | 360 |
| aactgaaatt | tactggaggt ctagtcataa gctacatttg accgttggat ctctagaaat | 420 |
| gctagaccaa | tatgtactac cttccatac | 449 |
| <210> <211> <212> <213> | 5164 1352 DNA Glycine max unsure at all n locations | |
| | | |

<400>

5164

| tatcagtgaa | gccgcgaaca | acacanaccg | cgagaacaca | gacctaccaa | catcagcacc | 60 |
|----------------|--------------|------------|------------|------------|------------|------|
| cnaagaagcg | ccaattgtga | gattgcggag | atccggctag | ccacgtcgac | cctcgcgcga | 120 |
| tagatcatct | ctagggtaca | acanatattc | cccgccncnc | nccntncatc | ancaaccaat | 180 |
| acacgcctca | tgggacgcac | aagacgggat | atacagctat | tcaggaggac | ggaggcgagc | 240 |
| ccacccacgc | tacaaagcgg | cgcggaaata | ataattataa | cgncnaccna | acgaccgcac | 300 |
| cccgcccaac | acaacacaaa | taatgcgcaa | ggggacatgc | gcgaaggcat | agaagaaaac | 360 |
| agacgcgacg | gccgacacag | caaggccagc | gacatatcag | aatccgcacc | aacaacaaaa | 420 |
| ggacagcgga | cgcgacagca | caacccacgc | gaaaccgagg | ccaacaacga | cacaccctga | 480 |
| acgccaatgc | tcacaataca | agaaacacca | gcgcaacgca | ccccacacga | gaacagaaac | 540 |
| ggcacacaga | acaggtgtgc | caaggcgacc | cgcacacgag | gcgcgggcac | acagaaacgc | 600 |
| acagagcgag | ggcacaacac | aaacacaccc | accagcacac | aactggcgcg | ccccgacac | 660 |
| gactaacaca | acatacaagc | cactaccgca | caccgcgcga | gagatatgca | caccgcgaca | 720 |
| cacaccagag | cacgcgaagc | ggcaacccgt | caacggcccg | cgacagagag | agagaaccgc | 780 |
| gcaacacgga | cggacacacg | gacacagcaa | cactccccca | cgaaagatca | accagccatc | 840 |
| gcacacgacg | acaacacggc | gaaatcatca | aaacgcagac | caagggaaca | cacaagcgga | 900 |
| gcgagcagca | cccacacacg | gcgagcggca | gaagcaacaa | caacccgcca | ctagaacgga | 960 |
| gagggcccga | gcaacgaacg | acgacataca | ctcaccaccg | cctccgaagc | aagaacaaaa | 1020 |
| cacaagcaac | accgacggca | accaagaacg | acgccacatg | cacacccacg | agcgcacaaa | 1080 |
| tatacaagca | cacgcgaccc | gagaggaacg | ccacccctaa | caagcaaggc | agggcgcaac | 1140 |
| cgaacgaggg | acatccacag | cacagagaac | accgccatcg | caaaagaaaa | cacaaagcac | 1200 |
| aaggctcacc | caccaaaacc | caaaccacag | aaacaaaaca | ggaaacggac | atcaacgcac | 1260 |
| ctacaaacaa | atcacgcaac | acgtaccaga | aacccgccaa | gcacaacacg | ccgacgcaag | 1320 |
| caacgtagca | acaacagaca | aaccacacaa | CC | | | 1352 |
| <210> <211> | 5165 1013 | | | | | |

<213> Glycine max

DNA

<212>

| <223> <400> | unsure at a | ill n lòcati | ons | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|------|
| tcctccactg | tacagggcgg | aaacacaaca | cnccaccgag | gaaggccnct | tgaattgaag | 60 |
| acgttcgcgc | acccggggta | ccctgaaaac | gtccgcagcc | ccccacccc | cactcccaga | 120 |
| atgaaaaaat | aggggcggcc | aagggcgaac | aaaaaaggag | ggccccccgc | cgccagtttt | 180 |
| tcctttttt | ttaacccaac | acccccaaca | cacaacgcca | tgcgaacgca | aaaaaaacac | 240 |
| acagcccgcg | ggcccgcacc | gcagaaaaga | taacggcaac | cacattcccg | ggagggaaat | 300 |
| aatccgcgac | aagaagataa | accacaggcc | tcccaaccaa | acatctcatt | ccgcgacctc | 360 |
| caaccacata | actccggaac | catcgaccgc | gggatggaac | ccccaacacc | cacagccgcc | 420 |
| cccagacccc | ccggaagaca | ccccacggag | ccgccaccac | aaatgcaaaa | gaaaccccac | 480 |
| cagaccccgc | cccagctcac | cttcacgaaa | cccccaacg | aaacaaccgg | caacccaccc | 540 |
| agcaataaga | gccaaccccg | cgccgccacc | ggacaggggt | aacaacacac | gaaaccgccc | 600 |
| ccccgaccc | actcacaaca | caacccagca | ctcaccggcg | acaacacaaa | agagacccac | 660 |
| ctcagagagc | ggcgacaccc | accgggtaac | acaaaacaaa | acccccgcga | cctacaaacg | 720 |
| ggggcgacaa | ccgcacccga | ccgctccgcc | accagccaca | accacacgac | gcacaacgcg | 780 |
| cccgacggga | cgccccaac | acccaaccgc | caacgctgcc | gcggggaaca | aagcctaaga | 840 |
| catagcaccc | ctttcacccg | geggegeeee | accagtcgcc | gcacccacaa | gccgcccacc | 900 |
| ctcacgccac | acagggcgag | ccaacgcgac | cgccccacc | ctaggacaac | catcgcaaca | 960 |
| gaaaccaaaa | cctacccaac | aacagccacc | ccgcccggac | agagtaccaa | ccc | 1013 |
| <210> <211> <212> <213> | 5166 240 DNA Glycine max | < | | | | |
| <400> | 5166 | | | | | |
| tgcagcgaca | tcggaactcg | atgtacgaaa | agtctccatg | tgggtgttgg | atcaagtggc | 60 |
| ctcagaataa | ttaagaaagg | gggttgaatt | aattattaat | gtaccttgac | taattaaaaa | 120 |
| atatccttct | taatggtact | aaaattaatt | aagcttttac | tacttaattt | aaaaagttaa | 180 |
| gaatataaaa | agaaacttta | cccaaagtta | aaaccaatat | ttaagtgcct | atcggaaatt | 240 |

| <210> <211> <212> <213> | 5167 903 DNA Glycine max | ĸ | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5167 | | | | | |
| acgcacgcat | taacattgcg | aaacaagcaa | ctcccacacc | ccgagacgca | tgaaatcgac | 60 |
| tcctacccgg | ggaccccaga | gtcagcagaa | gtccgcaagc | ctgttaaacg | aataaaaatg | 120 |
| aggccacgca | tatgctgccc | ccaacaacta | aaccagtttg | gaatgagagg | gtttctatat | 180 |
| tttaatgggg | ttcacaaacc | caataacaat | gcggacgatg | gggaaaaaca | aatgggaaaa | 240 |
| aaaagagatg | ttaacagcaa | ttttgttaac | ccccaacta | taaacggatt | tccgataacc | 300 |
| actcttaaaa | acaaaaccca | aactaatggc | cgaaaagatg | agaaaacaca | atctttttta | 360 |
| actaacgagg | gcgttaccac | acgaaatcgg | gaaccccaac | aaatgaaaag | aaaaggacaa | 420 |
| gaggtaaacg | ggactcccga | ggacccaaaa | aaaaatactt | taaaaaaacc | cggaatccct | 480 |
| tttaaaaaac | caattcccaa | tgcacagata | ccccacaat | tcttctctgc | cacagaaccc | 540 |
| caataaacaa | atcccccttc | aaacattaat | caaaaacacg | gggccggaga | aacaaaaaaa | 600 |
| caaccatcgg | gccctccacg | atacaagcac | gacacaaaca | aacccaccag | aatactccag | 660 |
| ggacaaacaa | aactctaact | tagaacacca | aaaagcggaa | cggagtcccc | taaaaccaga | 720 |
| gaaatcacac | ccccaccaa | agaacctccc | ccaaagacga | gggagccaat | gttgcacccg | 780 |
| acaagccccg | acaagcaggc | accccaacaa | ggggcaaaaa | gagggcaaac | ttctggcaaa | 840 |
| acgaaacggg | gcaccaataa | cgccaactcg | aaaacccgac | aaacaccccc | ccaccgaaat | 900 |
| tcc | | | | | | 903 |
| <210><211><212><213> | 5168 287 DNA Glycine max | × | | | | |
| <400> | 5168 | | | | | |
| tgataatttt | tcccgagctc | atggtctcag | gcaaagggga | ttccctttcc | ccttacctgt | 60 |
| ttgttcttag | catggagagg | ttggctttaa | agatcaatga | gctaagggag | aatggtgtct | 120 |
| agactcctat | ttccttatcc | agcacatatg | ttctttgaaa | ataatgttct | tttgttctgc | 180 |
| aaaagctaaa | gtggtggatt | ctacttctac | tcttgctcaa | tatggtattg | cttttggtct | 240 |

| gagagttaat | ctcaaggagt | ccaaattgat | taatttgctc | taggggt | | 287 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5169 395 DNA Glycine max | · | | | | |
| <400> | 5169 | | | | | |
| gctttgaggg | tgcgtaaccc | accatctttt | catagtagag | tatcgataat | gtgtctacca | 60 |
| tcacgatcat | cgtttttcct | ttccatcatt | gggggtacca | cctgggccgc | cagatccctc | 120 |
| caccttttgg | gcgtgttctt | tgaaagatcc | gtcccccttt | ttgcaaatgt | tctgtagttg | 180 |
| catcctatcc | ggaaccatat | caaaattgta | ctgatactgc | ctaacaaagg | caaccattag | 240 |
| gtccttccaa | gaatggactc | gggaagattc | caagttagtg | taccaggtaa | cagctacccc | 300 |
| agtaagactt | tcttggaagg | aatgtattag | caattcctca | tcttttgcgt | attcccccat | 360 |
| cttctgacaa | tacatcttta | aatggttctt | gggac | | | 395 |
| <210> <211> <212> <213> | 5170 287 DNA Glycine max | × | | | | |
| <400> | 5170 | | | | | |
| tctcccccaa | ttttctataa | atatggggag | aagtgaagtg | gaaaagggtt | cagcccctta | 60 |
| ggcacttctc | tctctttcga | atttgcttag | aaaaattgtt | ttcgtgaaga | aaatccaagc | 120 |
| cgaggcgttt | ccgtaacgtt | tccgggagtg | atttcgcgaa | ggttttcgac | cgttcttcga | 180 |
| cgttcttcat | tcgttcttca | tcgttcttcg | gtcttcaacg | ggtaagtacc | tcgaaccaag | 240 |
| ctttccgatt | cattctatgt | acccgtggtg | gttcacattg | tgtttcg | | 287 |
| <210> <211> <212> <213> | 5171 489 DNA Glycine max | × | | | | |
| <400> | 5171 | | | | | |
| agctttataa | tgggctttct | cttcattgct | actagtatca | ataatagtag | taggtttctc | 60 |
| ttccaatata | gtaagatcaa | gatccaaaac | accgagatga | aattggattt | gctcattcca | 120 |

| ataagagaag | ttaaacccat | taaaaattta | cacagatgat | acatgagaat | tcagtgaatt | 180 |
|------------|-------------|------------|------------|------------|------------|-----|
| gggaacaggt | actgtataat | aaaattcaaa | taagcatttt | gagatataaa | acacatgtca | 240 |
| tacatataat | tcatttagat | aataattaat | gtacattgtt | gttctccttt | gggtgataca | 300 |
| ccagcataac | atacaaatat | gacgatgcta | ataaaactct | taacattatt | tgacaattaa | 360 |
| atatgtacca | attaatggta | cctattacct | ttgagtatat | aaataaaact | aataatacat | 420 |
| agaaatcacc | taaaattata | ttcattaatt | ttaagaacaa | ctaatccacc | tttgggtgat | 480 |
| ccataaata | | | | | | 489 |
| | | | | | | |
| <210> | 5172 | | | | | |
| <211> | 290 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <400> | 5172 | | | | | |
| taggaaaaat | tgcaagagat | gatcaaaagt | tgtcctcacc | atggcttttc | tcaacaaagg | 60 |
| ttggttgata | ttttctatgg | tggaatgtcc | tcacataata | ggacaagttt | agatgttgct | 120 |
| tgttatggca | atctcatgtt | aaagccctta | catatatcat | caaaatcatt | gaagacatgt | 180 |
| gttctaaccc | ctacaataac | ttaagggata | ggacgattac | gaagagaggt | gtcaactagg | 240 |
| tgcagaaaga | tgaatccata | actaaattat | gaaagcagat | gcaagctcta | | 290 |
| | | | | | | |
| <210> | 5173 | | | | | |
| <211> | 429 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <400> | 5173 | | | | | |
| agcttccact | ccagttccca | ttcgagtacc | taacgggtgt | gattttcaaa | cgttaaaaac | 60 |
| cagaatatat | aataccctta | agctaaccga | caaacaattt | ttggatgaaa | tttactaacg | 120 |
| acagcctttc | acgtatgcag | gtaatcaatt | tcggtttaaa | tgtatgcaac | tgaaagatga | 180 |
| tgctgatgtt | aacacaatgt | taatgtgtaa | tcatgaattt | ttgtttgttg | atccgattga | 240 |
| gtttttatgt | agcattgcta | gaaccccaga | tggcatttta | aatttacttg | aatctattat | 300 |
| gaaccctact | catgatgccc | tgctttatta | caatgggagg | tggaacatgt | cacgccaaaa | 360 |
| tgagtttggt | ggttactcat | tcgtaggaaa | aaatcccaaa | aactttgaca | ttcccactgg | 420 |

| atgtaccat | | | | | | 429 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5174 280 DNA Glycine max | ς | ٠. | | | |
| <400> | 5174 | | | | | |
| ttatgttttc | cctcccgtgg | atgtagcctt | gatcaaaggt | gaaccatgta | aatctgtgtg | 60 |
| ttctttctct | ttttcttct | ctttcacctt | gctgcacaat | tatgtgtgta | tgacatttct | 120 |
| attctgttgc | atctcctgct | gctgttcttg | tttgttcttc | atcacttcca | caacaaactg | 180 |
| gtatcaagag | ctcaagttgc | gatcaaggga | attcaagatt | cttgtctgaa | tacaaagatc | 240 |
| aagctatggg | agtcttgttt | ctggttcttc | cactgcttca | | | 280 |
| <210> <211> <212> <213> | 5175 587 DNA Glycine max | ĸ | | | | |
| <400> | 5175 | | | | | |
| agcttctccc | ccaattttct | ataaataggg | ggagaagtga | agtgaaaaag | ggttcagccc | 60 |
| cttaggcact | tctctctt | tcgaatttgc | ttggaaaaat | cgtttccgtg | aagaaaatcc | 120 |
| aagccgaggc | gcttccgaaa | catttccgta | acatttccgt | gaggaatttc | gcgaaggttt | 180 |
| cgacagttct | tcgacgttct | tcattcgttc | ttcatcattc | ttcgatcttc | aacgggttag | 240 |
| tacctcgaac | caagcttttc | gattcattct | atgtacccgt | ggtggtccac | attgtgtttc | 300 |
| gtgtatttt | attctcgttt | catttacttt | ttataccctt | ttttgacgtg | cttaagccat | 360 |
| tttatttaag | tcatttctcg | cttaacctta | aaataaaata | aatttccacc | gatcgtttaa | 420 |
| attgtattat | ccggtaactt | cgtttaaaac | aaaatctaac | cggtcaatcg | tgccgtaacc | 480 |
| acgttggaaa | ttcaaaaaag | aaggtaaata | ataatataat | aatcaaaaaa | atatttttta | 540 |
| tttaaataaa | gcgaaaaatc | aatccggcct | tttctctttg | ggaattc | | 587 |
| <210><211><212><213> | 5176 475 DNA | · | | | | |

| <223> <400> | unsure at 6 | unsure at all n locations 5176 | | | | | | |
|-------------------------|-----------------------------------|-----------------------------------|------------|------------|------------|-----|--|--|
| atcctctaag | acacccgcgg | catgcaagct | tcggctaaat | tagtctaaac | ttttgtaagc | 60 | | |
| tatttaagct | aagtctagtc | caacaagagg | gattcttata | gactaagctt | agtttaagtt | 120 | | |
| agtctaaacc | taagagggtt | gtctaaatta | agcctagtcc | aacaagaagg | atatgaggat | 180 | | |
| gaagcttgga | ttgattcatt | ctaactaggg | atcgaggttt | aataatttag | gctagaacct | 240 | | |
| agaaaacaaa | agcatgattg | attagagaaa | catctttata | tacatcagct | ggtttgttag | 300 | | |
| aaagacccaa | catctttacg | tactgttgtc | aatcttactt | acttgcattt | ttactgtttt | 360 | | |
| tagcgtagac | ttagtttaat | tctattctaa | atcatcaatt | atcaatgttt | ctttcaacaa | 420 | | |
| tgccttattt | atgaatntaa | ccctgtctaa | gactaattcc | ctgagttcca | tactc | 475 | | |
| <210> <211> <212> <213> | 5177 284 DNA Glycine ma: | x | | | | | | |
| <400> | 5177 | | | | | | | |
| tcttatccaa | ggctcatctt | ggtggtgaag | ttccttcttc | catggcttat | tccctagtgg | 60 | | |
| atggcgcctc | ctctcacctc | ttctcctttg | tcttccactg | catctccatg | gtggaaaatc | 120 | | |
| accattaaag | gacctcattg | aagctcaaag | atccagcctc | catagaagct | tcacaagcaa | 180 | | |
| gcttccatca | agtggtaatc | agagcacaag | agctttaagt | aggtgctcct | taaacctcca | 240 | | |
| ttaatctttt | actttacctt | ctcttccatt | gttgtttctt | catt | | 284 | | |
| <210> <211> <212> <213> | 5178 408 DNA Glycine max | · × | | · | | | | |
| <400> | 5178 | | | | | | | |
| agcttgctct | aaatttacat | tgatgtttgt | atttatggga | ggaggttgta | tgccattttt | 60 | | |
| tttaattgtg | tcccactggt | aaaactaact | ttccaaatgt | ttgccttcgc | aggaaatggc | 120 | | |
| cccgaggaag | cttgcctcaa | agaagtccag | gaaagacaag | gcagccgaag | gaactaattc | 180 | | |
| cgctccggag | tatgacagtc | accgctttaa | gagcgctgta | caccagcagc | gcttcgaggc | 240 | | |

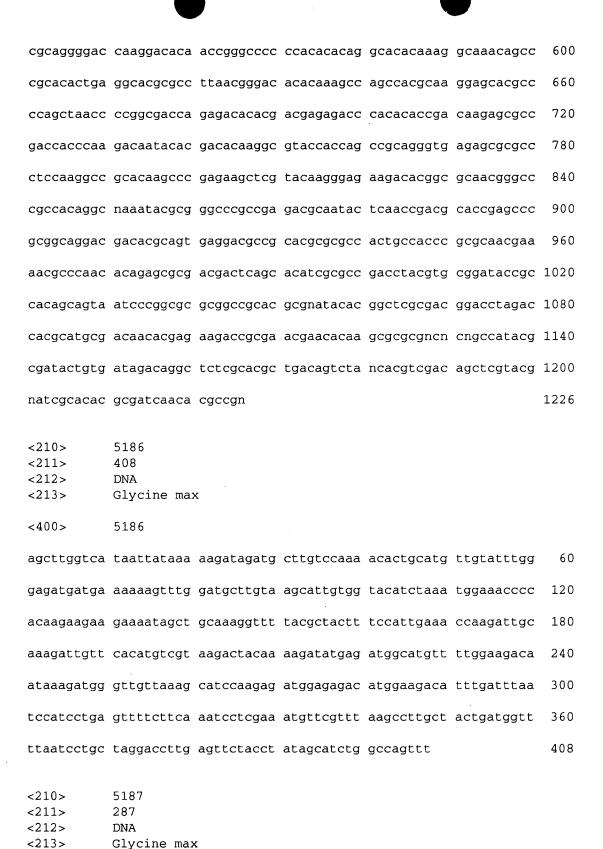
| catcaaggga | tggtcgtttc | tccgggagcg | acgcgttcag | ctcagggacg | acaagtatac | 300 |
|--|--|---|--|--|--|---|
| tgatttccag | gaggaaatag | ggcgccgacg | ggggacatca | ctggttactt | ccatggccaa | 360 |
| gtttgatcca | gaaaaaatcc | ctgagtttta | tgccaatgct | tggccaac | | 408 |
| <210> <211> <212> <213> | 5179 283 DNA Glycine max | ς. | | | | |
| <400> | 5179 | | | | | |
| tttgcaaggt | gaaatcattt | atcctatctc | cgacagccaa | tgggtgagtc | ccgtccaggt | 60 |
| agtcccgaag | aagaccggcc | tcacagtgat | cagaaatgag | aaggaggagt | tgattcctac | 120 |
| tcgggtgcag | aacagttgga | gagtctgcat | tgactatagg | aggctgaacc | aggttaccaa | 180 |
| aaaggaccat | tttcccctgc | cattcattga | ccagatgctt | gaacgcctgg | caggtaaatc | 240 |
| ccactactat | ttccttgatg | gtttttttgg | ttatatgcaa | att | | 283 |
| <210> | 5180 | | | | | |
| <211> <212> <213> | 731 DNA Glycine max | × | | | | |
| <212> | DNA Glycine max | K all n locat: | ions | | | |
| <212> <213> <223> <400> | DNA Glycine max unsure at a 5180 | all n locat: | | tatttgaata | taattcattg | 60 |
| <212> <213> <223> <400> agctttctta | DNA Glycine max unsure at a 5180 gtacaaaatg | all n locat: | ttgtgattgg | | taattcattg tagaagtaaa | 60 |
| <212> <213> <223> <400> agctttctta tatacatacc | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag | all n locat: | ttgtgattgg gtagttttt | gggtgaacat | tagaagtaaa | |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac | all n locat: catattcttt tagtatctta | ttgtgattgg gtagtttttt agttctgttt | gggtgaacat | tagaagtaaa | 120 |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata tgttgatgta | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac attatctctc | all n locat: catattettt tagtatetta agaggaetta | ttgtgattgg gtagtttttt agttctgttt tagtacatgt | gggtgaacat ttttttttgt atatgtatca | tagaagtaaa atatgttttg ttttttcta | 120 180 |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata tgttgatgta aatacatatc | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac attatctctc aatttgctat | catattettt tagtatetta agaggaetta attgeacaae | ttgtgattgg gtagtttttt agttctgttt tagtacatgt gttttaata | gggtgaacat ttttttttgt atatgtatca agcaaaaatg | tagaagtaaa atatgttttg tttttttcta aaagctatgc | 120 180 240 |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata tgttgatgta aatacatatc tctaacccaa | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac attatctctc aatttgctat atacacaatc | catattettt tagtatetta agaggaetta attgeacaae aaaaaggttt | ttgtgattgg gtagtttttt agttctgttt tagtacatgt gtttttaata ctactttaca | gggtgaacat tttttttgt atatgtatca agcaaaaatg aagtgaaaaa | tagaagtaaa atatgttttg tttttttcta aaagctatgc tgtattattt | 120 180 240 300 |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata tgttgatgta aatacatatc tctaacccaa tggataaatt | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac attatctctc aatttgctat atacacaatc ttgtgttttg | catattettt tagtatetta agaggaetta attgeacaae aaaaaggttt cacatatttg | ttgtgattgg gtagttttt agttctgttt tagtacatgt gttttaata ctactttaca attcatggtt | gggtgaacat tttttttgt atatgtatca agcaaaaatg aagtgaaaaa tagaaaaaaa | tagaagtaaa atatgttttg tttttttcta aaagctatgc tgtattattt actattagct | 120 180 240 300 360 |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata tgttgatgta aatacatatc tctaacccaa tggataaatt catttatgat | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac attatctctc aatttgctat atacacaatc ttgtgttttg ccttaaaata | catattettt tagtatetta agaggaetta attgeacaae aaaaaggttt cacatatttg ataaaaacaa | ttgtgattgg gtagttttt agttctgttt tagtacatgt gttttaata ctactttaca attcatggtt attcctttac | gggtgaacat ttttttttgt atatgtatca agcaaaaatg aagtgaaaaa tagaaaaaaa tagagaaggg | tagaagtaaa atatgttttg tttttttcta aaagctatgc tgtattattt actattagct tattcagggc | 120 180 240 300 360 420 |
| <212> <213> <223> <400> agctttctta tatacatacc tgtatggata tgttgatgta aatacatatc tctaacccaa tggataaatt catttatgat ttttgtgcaa | DNA Glycine max unsure at a 5180 gtacaaaatg tgaattggag ggtcatacac attatctctc aatttgctat atacacaatc ttgtgtttg ccttaaaata atggaaacct | catattettt tagtatetta agaggaetta attgeaeaae aaaaaggttt cacatatttg ataaaaacaa tgtattaatt | ttgtgattgg gtagttttt agttctgttt tagtacatgt gttttaata ctactttaca attcatggtt attcctttac ntttgttgtg | gggtgaacat tttttttgt atatgtatca agcaaaaatg aagtgaaaaa tagaaaaaaa tagagaaggg gaaatggcta | tagaagtaaa atatgtttg tttttttcta aaagctatgc tgtattattt actattagct tattcagggc tgccctcatt | 120 180 240 300 360 420 480 |

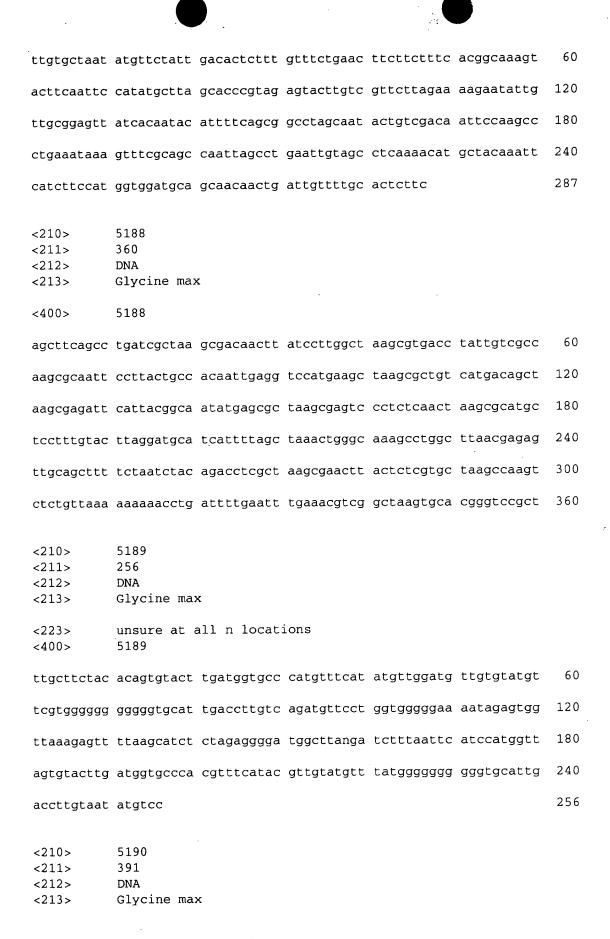
| ggattcaaaa | gattgaaaaa | tttaaaattt | attgggcgaa | tttccccttt | tgggatttct | 720 |
|---|--|---|--|---|---|--------------------------|
| aaaaatttcc | С | | | | | 731 |
| <210> <211> <212> <213> | 5181 287 DNA Glycine max | ς | | | | |
| <400> | 5181 | | | | ·. | |
| ttgagccaaa | atcctgattc | accataaacc | ttgacccagg | gtgagaatgt | caatccttac | 60 |
| cctcggaagc | aaaaaaagaa | tagaggggaa | atttccaatc | aaagaaaaag | agaaggaaaa | 120 |
| tttccaatga | aagcaaaaaa | agaaaagaag | gaaaattccc | caatcaaaga | gtgggagaaa | 180 |
| gcaaaaaaag | aaaagaagga | aaattcccca | atcaaagagt | gggagaaagc | aaaaagaaaa | 240 |
| gaaaggaaaa | ttcccaatca | aagaatggga | gaaagtaaaa | aaggaag | | 287 |
| <210> <211> <212> | 5182 350 DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <400> | Glycine max 5182 | ζ | | | | |
| <400> | 5182 | | actcatccgg | acatccatgt | ataaagttat | 60 |
| <400> tcaatttcga | 5182 ccatcacgat | atattacccg | | acatccatgt agcgtctcca | | 60 120 |
| <400> tcaatttcga tgtcaattca | 5182 ccatcacgat attttctcag | atattacccg agcttcggat | cagaattttg | | tatattacgg | |
| <400> tcaatttcga tgtcaattca gactcattca | 5182 ccatcacgat attttctcag gacattcgaa | atattacccg agcttcggat taaaaaggta | cagaattttg | agcgtctcca | tatattacgg | 120 |
| <400> tcaatttcga tgtcaattca gactcattca tttcaatttg | 5182 ccatcacgat attttctcag gacattcgaa gaaaatctct | atattacccg agcttcggat taaaaaggta cgataaaatg | cagaattttg ttgtcgtaag caacactctg | agcgtctcca aatttgatac | tatattacgg caacttccgt gagtaaaaag | 120 180 |
| <400> tcaatttcga tgtcaattca gactcattca tttcaatttg ttattgttgt | 5182 ccatcacgat attttctcag gacattcgaa gaaaatctct | atattacccg agcttcggat taaaaaggta cgataaaatg taagaagttt | cagaattttg ttgtcgtaag caacactctg cgttttcaat | agcgtctcca aatttgatac tcgggcatcc ttggaacgtc | tatattacgg caacttccgt gagtaaaaag | 120 180 240 |
| <400> tcaatttcga tgtcaattca gactcattca tttcaatttg ttattgttgt | 5182 ccatcacgat attttctcag gacattcgaa gaaaatctct atgaatttc | atattacccg agcttcggat taaaaaggta cgataaaatg taagaagttt cgtgtataaa | cagaattttg ttgtcgtaag caacactctg cgttttcaat | agcgtctcca aatttgatac tcgggcatcc ttggaacgtc | tatattacgg caacttccgt gagtaaaaag | 120 180 240 300 |
| <400> tcaatttcga tgtcaattca gactcattca tttcaatttg ttattgttgt acgggactca <210> <211> <212> | 5182 ccatcacgat attttctcag gacattcgaa gaaaatctct atgaattttc accggacatc 5183 354 DNA | atattacccg agcttcggat taaaaaggta cgataaaatg taagaagttt cgtgtataaa | cagaattttg ttgtcgtaag caacactctg cgttttcaat | agcgtctcca aatttgatac tcgggcatcc ttggaacgtc | tatattacgg caacttccgt gagtaaaaag | 120 180 240 300 |
| <400> tcaatttcga tgtcaattca gactcattca tttcaatttg ttattgttgt acgggactca <210> <211> <212> <213> <400> | 5182 ccatcacgat atttctcag gacattcgaa gaaaatctct atgaatttc accggacatc 5183 354 DNA Glycine max 5183 | atattacccg agcttcggat taaaaaggta cgataaaatg taagaagttt cgtgtataaa | cagaattttg ttgtcgtaag caacactctg cgttttcaat ggtattggca | agcgtctcca aatttgatac tcgggcatcc ttggaacgtc | tatattacgg caacttccgt gagtaaaaag tttatatatt | 120 180 240 300 |

| tggatcctaa | cttgaaaata | tcaaatacca | atctcttgag | taggaaggga | aaaaaggcat | 180 |
|-------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| tttttattta | tttgccaaat | caatggtgat | tggtaattta | ttagatactg | tttgggagaa | 240 |
| aatttcagac | ttataacatt | ttcctctctc | ggtttttctt | tcaaccacca | tgtaaatctt | 300 |
| ataattacta | ctaaaaaggg | catattataa | gccccgcct | taaaaaaaaa | aaac | 354 |
| <210> <211> <212> <213> | 5184 282 DNA Glycine max | ς | | | | |
| <400> | 5184 | | | | | |
| tacttaagct | tggaacatat | ttactgaatt | ctagctcctt | ttaaggacct | agttagaata | 60 |
| tctggcgact | ggtcattgga | gttaataaac | tcatgttaat | ctccttggac | aataatttct | 120 |
| caccaatgaa | ataacaatca | atctttatgt | gtttaaatcc | tcttatgaaa | aaccggattt | 180 |
| gaggcaatgt | gaacagtata | aacttaattt | gctcaaattc | acaaaattcc | aatttttgga | 240 |
| gaaattggtt | aatccacata | agttcacatg | tagccatagc | ca | | 282 |
| <210> <211> <212> <213> | 5185 1226 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a 5185 | all n locat: | ions | | | |
| gtcgacggac | ctcgancagc | ccactncacg | ccccncctc | cagcccgcgg | ncantttgaa | 60 |
| nccgttggtc | gaaccaaccg | acccgcgaac | cagaacaaca | cggaaaaaaa | ccccgcgcc | 120 |
| ccaaacttcg | ggaccatccg | ctggaccggc | tcaagcaagc | ccacagaagg | ggcgcgaccg | 180 |
| ccagggggga | atttttggat | gcaactcaaa | ccccccacc | agccgaggaa | gccaaaaatg | 240 |
| gcgaggcgcg | ccccacaaaa | actgcacagg | aaccacaaca | caaccacaca | ccccgcagca | 300 |
| acaaaagcga | aacggcgcgc | ggcggaaacc | cggcgaccaa | acacaacacc | gagaaaccca | 360 |
| gcggccaaga | aagccccacg | cacagaagag | gagcggcgac | gccaacgagt | aggagaggca | 420 |
| ccgtgacaga | gaccgacacg | ccgagagcag | ggaaaccctc | cgccaagaag | ggcgacgacg | 480 |
| gtccaaacgg | gacgaagcaa | caaagacaac | aaggggaggg | agcccgaaca | aagcacacga | 540 |

<400>

5187



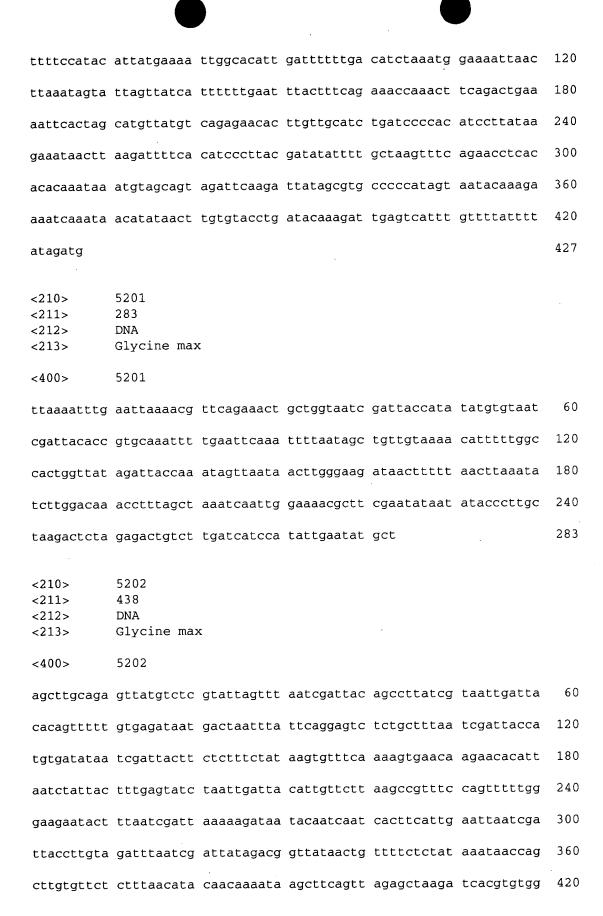


| <400> | 5190 | | | • | • | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| agcttctatt | gaaatgccac | aatcatataa | ggcacttaac | ttaagcaaca | acacacataa | 60 |
| actttcttat | tcttaaaact | tttttttt | attttagcag | tttttacttt | cttgatacaa | 120 |
| aatttatgtg | gttgttgcat | gtcttaccat | aatcatcatt | acctaatacc | ttcccccaaa | 180 |
| tttggaacaa | atttgccttg | aaccacaatg | ctctcctaca | acctaaagaa | aggtagatgg | 240 |
| agattataat | tcaacaggtt | tagggttcaa | ctcaatcaat | cagattcaag | ctcaaaatgg | 300 |
| gtgcaatgga | ttcatcattc | atgaacaggg | taagctattt | ggctaaatgg | ctaattcaat | 360 |
| caatcatggc | cttcatcatt | tccaaatcat | g | | | 391 |
| <210> <211> <212> <213> | 5191 287 DNA Glycine max | ς | | *: | | |
| <400> | 5191 | | | | | |
| tatcattggc | tcgttacccc | ctattaattt | ggaaaattac | ccacttggag | tcacttatta | 60 |
| cctttatttt | cttggcccct | agctcctcga | ctattcacac | tcctgcaatg | caagcttcat | 120 |
| actctgcatg | gttgttggtt | gttggaaagg | aaaaatttaa | ggcttgcttg | actattaagc | 180 |
| catatgaaga | ttccaataag | acatagctcc | acttcttttc | tcgtgggaag | acccgtctac | 240 |
| aactatcatc | catacttgat | ctctttttgg | gtactccaag | atcagct | | 287 |
| <210> <211> <212> <213> | 5192 594 DNA Glycine max | ς. | | | | |
| <400> | 5192 | | | | | |
| agcttaagcc | ttttatacat | gcttagtaag | gatcaaagat | gttaaaaaaa | tggattgatc | 60 |
| tctaagtttc | taaaaagcaa | tgagttcaac | acactataat | tgattacaaa | gttttgttat | 120 |
| caatcacaaa | gtgttagaac | aaacaacaaa | tctctcttct | acttgaaatt | tttggcaagt | 180 |
| tttgacaaat | taatcgatta | cttgtttcaa | taatcgatca | tagaagtcag | tttcaaaaga | 240 |
| agaaagactt | tgtagcttaa | gctaatcgat | taccttttat | tgtaatcgat | taaattgtat | 300 |
| ctagaaataa | tcaaagttag | tttcaaaaga | agaaagactt | tgtagcttaa | gaagttetet | 360 |

| acatgatgaa | ataatcaatt | accacacctg | ataatcgatt | attccagaaa | atacagaagc · | 420 |
|--|--|--|--|---|--|---------------------------------|
| atgagaagct | ctttatttga | aacaagataa | tagattatca | tttcctataa | tcgaatacaa | 480 |
| gatttatgaa | aatgcataac | aaaaaggatt | ttgacgtatt | aatcgattac | cataatctat | 540 |
| aattagttaa | aattggttta | cccatcaaaa | ttataaatac | ccttttatct | tatt | 594 |
| - - | 5193 279 DNA Glycine max | ĸ | | | | |
| * | | 2222556265 | ctatttatat | tteteette | tagatttaaa | 60 |
| | | aaaattcagt | | | | |
| | | aaaatgattt | | | | 120 |
| gataatagct | gacaagggaa | aacatgtggc | ccgtggctga | tcaaaatcaa | aattgccaaa | 180 |
| ggtttggaaa | caatcctccc | atggtcaagg | gtgccttttg | ctgtaacccc | ccttaattac | 240 |
| ccccaattgg | ttaaaaaaat | ttcccatttt | ttttattac | | | 279 |
| | | | | | | |
| <210> <211> <212> <213> | 5194 507 DNA Glycine ma: | x | | | | |
| <211> <212> | 507 DNA Glycine mas | x all n locat | ions | | | |
| <211> <212> <213> <223> <400> | 507 DNA Glycine mas unsure at a 5194 | | | ttgagattag | gtcatgttag | 60 |
| <211> <212> <213> <223> <400> agctagtaat | 507 DNA Glycine ma: unsure at a 5194 acattaattg | all n locat | actttggcat | | | 60 |
| <211> <212> <213> <223> <400> agctagtaat tgaacgggga | 507 DNA Glycine max unsure at a 5194 acattaattg | all n locat ataaaataaa ttgagaaata | actttggcat aaatctgtta | ggtggcgata | | |
| <211> <212> <213> <223> <400> agctagtaat tgaacgggga acttgaattt | 507 DNA Glycine max unsure at a 5194 acattaattg ttacatgaaa tgtgatcatt | all n locat ataaaataaa ttgagaaata gtgtgcttgg | actttggcat aaatctgtta taaatcacat | ggtggcgata agaataagct | aactagataa | 120 |
| <211> <212> <213> <223> <400> agctagtaat tgaacgggga acttgaattt tattcatgtt | 507 DNA Glycine max unsure at a 5194 acattaattg ttacatgaaa tgtgatcatt ttatctaggc | all n locat ataaaataaa ttgagaaata gtgtgcttgg cttttgagta | actttggcat aaatctgtta taaatcacat tgtgcatttt | ggtggcgata agaataagct gatttatagg | aactagataa ttggcactgg | 120 180 |
| <211> <212> <213> <223> <400> agctagtaat tgaacgggga acttgaattt tattcatgtt agtgaaaatt | 507 DNA Glycine max unsure at a 5194 acattaattg ttacatgaaa tgtgatcatt ttatctaggc catggtggaa | ataaaataaa ttgagaaata gtgtgcttgg cttttgagta gctcatactt | actttggcat aaatctgtta taaatcacat tgtgcatttt tctcaccatc | ggtggcgata agaataagct gatttatagg atagatgatt | aactagataa ttggcactgg gaccatttag | 120 180 240 |
| <211> <212> <213> <223> <400> agctagtaat tgaacgggga acttgaattt tattcatgtt agtgaaaatt agtatgtctg | 507 DNA Glycine max unsure at 6 5194 acattaattg ttacatgaaa tgtgatcatt ttatctaggc catggtggaa tatgtttga | ataaaataaa ttgagaaata gtgtgcttgg cttttgagta gctcatactt | actttggcat aaatctgtta taaatcacat tgtgcatttt tctcaccatc agaagctttt | ggtggcgata agaataagct gatttatagg atagatgatt caaatattca | aactagataa ttggcactgg gaccatttag tctcaagaag gagagtggaa | 120 180 240 300 |
| <211> <212> <213> <223> <400> agctagtaat tgaacgggga acttgaattt tattcatgtt agtgaaaatt agtatgtctg aactcttatt | 507 DNA Glycine max unsure at a 5194 acattaattg ttacatgaaa tgtgatcatt ttatctaggc catggtggaa tatgtttga ggaaatcaac | all n locat ataaaataaa ttgagaaata gtgtgcttgg cttttgagta gctcatactt aaaataaatc ttggtacaaa | actttggcat aaatctgtta taaatcacat tgtgcatttt tctcaccatc agaagctttt actaaaaatt | ggtggcgata agaataagct gatttatagg atagatgatt caaatattca ttaaggactg | aactagataa ttggcactgg gaccatttag tctcaagaag gagagtggaa | 120 180 240 300 360 |

| <212> | 5195 282 DNA Glycine max | | | | | |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5195 | | | | | |
| tagtcattat | aattaaagtt | tctcatttca | tttcaagaat | gtgttttgtg | gaaaaatttt | 60 |
| atttatttta | taattattgt | aattaattgt | taaaatacta | aaaaaagtg | tttaattatt | 120 |
| tatatttgtt | attatttgtt | taacaattat | aattataatt | tgaatactat | tataatataa | 180 |
| tttctttatt | ataaatcatt | ttatttgata | attattcatt | ctcattcctt | cttattggtt | 240 |
| tcatattgtt | caataatata | taatatactc | ttatataaaa | aa | | 282 |
| <212> | 5196 395 DNA Glycine max | ĸ | | | | |
| <400> | 5196 | | | | | |
| agcttaatgc | aaactatttc | tataagaaga | tgggtttggc | cccttcatca | tttgattcac | 60 |
| acttaaattc | ttcgcttagg | attgttacga | tttttgttaa | taaatctctg | cttttatgaa | 120 |
| caaaaatata | taaagttggt | ttacgagata | aagacaaagt | ttttaatggc | tttgtataaa | 180 |
| ttatagatgt | cgcatgggaa | ttttttagga | aaagggaaat | tggagctgca | aacctcaact | 240 |
| aaccacgatg | agtaaagtcg | ccaccataac | aagctagaac | caaatatcaa | gtgaaaaatt | 300 |
| gtgaaaaatc | accaaagaga | aaatgcgcct | tgctacaatg | aatcctcaat | ttgagaccaa | 360 |
| gaacatgatc | ataaactcac | tatagtgaat | gaatc | | | 395 |
| <210> <211> <212> <213> <400> | 5197 284 DNA Glycine max | x | | | | |
| tctagccaaa | tggacttacc | ttgaattaat | tcctttgata | gcccttttga | gccttgtttc | 60 |
| cctttccttg | ttttgaagct | cactacaagc | cttaagtgaa | aaaccatgat | attaccatat | 120 |
| ccttaaggaa | ttttggagct | ttggaattgt | tttgggaata | agtgtggggg | gtttttgttt | 180 |

| cattggacaa | cttgttttgt | tggctatgct | tcatgatgta | ttttgggcca | tacttgatgt | 240 |
|----------------------------------|-----------------------------------|------------|------------|------------|-------------|-------|
| acattgtata | ttggttaaat | gttggacatg | ctgaatgaaa | tgtt | | 284 . |
| <210> <211> <212> <213> | 5198 408 DNA Glycine max | ς. | | | | |
| <400> | 5198 | | | | | |
| agcttcacct | tctggtcctc | ctcatagttg | tggcatgaga | aaacatgctc | tattttcatc. | 60 |
| tcccacttta | tgtggcctcc | ggatcattct | ttcctttaaa | tggaggaatg | ttgagtttaa | 120 |
| taccatcaat | tcggttttgt | ctaggaacac | catcattccc | tcttctcctc | ctttcttctt | 180 |
| cattatgatc | tctattctcc | atttgatcca | acctctcgtg | gagcgcatca | tctcgttgtt | 240 |
| tcattaacct | ctccatatgt | tgcatcaaag | cttgcatttg | gaattgcgaa | agccccactc | 300 |
| catcattagg | attagtacct | gacatctcaa | acaaacaaat | caaacgtaac | acgacaatta | 360 |
| tagttgctgt | ttgaatacct | cacccactca | agtgtatcac | acaattat | | 408 |
| <210> <211> <212> <213> <400> | 5199 284 DNA Glycine mas | × | | · | | |
| tctgttatga | atttcgagtg | tctcgatata | ctacgggaca | caatcggaca | tccgagtaaa | 60 |
| aagttattga | catttgaatt | tgctcatagc | attcgttgtc | aattacgagc | gtctagatat | 120 |
| attaaaggat | tcattcggac | atccgagtaa | aaagttatta | tctttttatt | ttgctcagag | 180 |
| . cttctgttt | caatttcgag | catctcgata | tattacagga | ctcaatcgga | tatccgagtc | 240 |
| aaaagttatt | gtcgtttgga | tttgctacga | gcttccggtt | tcaa | | 284 |
| <210> <211> <212> <213> | 5200 427 DNA Glycine ma | × | | | | |
| <400> | 5200 | | | | | |
| agcttgaggc | acttgccttt | taacctagtg | tcccaaaagt | ggccttaccc | aaggatcttg | 60 |



| ttattaggtt | aagaaaga | | | | | 438 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| | 5203 278 DNA Glycine max | ς. | | | | |
| <400> | 5203 | | | | | |
| tgtaatcgat | tacagcattt | gtgtaatcaa | ttaccactaa | ggaattttca | aaaaataact | 60 |
| cccaagagtc | acatctattc | aaaagatttt | tgaatggcca | tcaaaggtct | ataaataggt | 120 |
| gacttgggac | acgaaatttc | ttagagtttt | cctgaacaaa | ttgtcttatc | ctctcaatac | 180 |
| caaattgtct | tataactctc | aaaaagaatt | ccttggccaa | aacacttgca | aattcaataa | 240 |
| ggaatcttaa | gtgatcttca | attttaatat | ctttctct | | | 278 |
| <212> | 5204 413 DNA Glycine max | ς | | | | |
| | | gaatcatatt | gattattaat | taatgcttta | tttgttttt | 60 |
| _ | | | | aagcaaccta | | 120 |
| | • | | | atattaacat | | 180 |
| taaatattaa | gtaaccaagg | aatccaaaaa | gagaaagttc | acctccctgc | aagtcactgt | 240 |
| aatactacta | atgacaatcc | tacccaatca | ccaaaaaaac | ataaataatg | ccttaccctc | 300 |
| ccacatgttg | ttcccaaaat | attaatgctt | tatttgttgt | tgatgtatgc | aatgcaaggc | 360 |
| aattgtgaat | cccaagaatg | aaggatttca | tgaatgagag | caagctgaat | gat | 413 |
| <210> <211> <212> <213> | 5205 275 DNA Glycine max | × | | | | |
| <400> | 5205 | | | | | |
| tgaagtcagt | tggattcatg | tattattatt | cgtgtaatgt | ataacttcta | ttaggatatt | 60 |
| gctatttgca | ctatccactg | ggatgcactt | taaccatatc | ccaaaattgt | tccttgagga | 120 |

| attgcacatg | attatttgat | ttcactccga | ataacaatga | aatcatattt | tttttgtttt | 180 |
|-------------------------------------|--|------------------|------------|------------|------------|-----|
| aaaagacatt | ataatagata | taccattcta | ttgtgttatc | atccgataat | gaaatcatag | 240 |
| tttaatgtgt | tatttttcaa | aataataata | aaaaa | | | 275 |
| <210> <211> <212> <213> | 5206 878 DNA Glycine max | × | | | | |
| <400> | 5206 | | | | | |
| cgaccaccct | ccgtacgcat | gtatacaaca | ccccgaaggc | cgatgactct | tatggtccct | 60 |
| tccggacccg | ggactcctaa | aaaaccccgg | ccgcaacatg | cgagaaatgc | tctgctaact | 120 |
| taatcaacaa | cgccctcacg | gaatggatac | cccagttttg | tgccaccaga | ctaatttatt | 180 |
| caggagggtc | tggcttaatc | gattaccatg | tgagataatc | cgcatacctc | tctttccata | 240 |
| aggggtgcaa | aagggaacaa | caacacgttt | catcgattac | cttgaagatc | taattgatta | 300 |
| cattgttcct | aaaccgctcc | ccatatttgg | ggaagaatac | cttaatccat | taagaagata | 360 |
| ataccatcat | cactctagtg | aattaaacga | agaccgtggg | gagtaaatcg | ataactgacg | 420 |
| gctaaactgg | gttctctata | ataaacagcc | cgggttttct | gaacatacaa | caaacaaacc | 480 |
| tcagtagagc | taaaacccct | gggggtatcc | ttgaagaagg | aaaaaaaca | agttttaaaa | 540 |
| acaatccgta | cctacagtca | gacctctggt | gggaaaaaca | tccgtgaaag | accggagttt | 600 |
| cacgctcagg | gcactgcgga | agcaccatgg | catttcaact | aagggttatt | ggagaggctg | 660 |
| acccaaatat | gcatagtata | cccctgggtc | atcgccggaa | gggtctcgcc | cgcacggtct | 720 |
| cgcctcaagg | gacggtacat | cacacagcga | tggccagcac | agggatatgt | ctgtgaggag | 780 |
| cgagtatgct | accaccgtta | tctctacgca | cctacgtgtc | ctcatgccgc | tcccgcaact | 840 |
| gagcactcac | cgtgacgcta | tctctactcc | atgcaccg | | | 878 |
| <210> <211> <212> <213> <223> <400> | 5207 1104 DNA Glycine ma unsure at 5207 | x all n locat | ions | | | |
| ctcatgcaca | cccgctaatg | aactatgtgc | attcattatc | caggcggcta | acaccgccta | 60 |

+

gggagttccg aagaccatta tattaaaaat aacattagtt ggcatacgaa acacacagtt cactgtaatt cccaagtggg catccagcac acttgggcaa caaatgcnta cacaataaca atcctgcctt ccattaaatt agaggaaggg cccttgctat atataaatca atatgtgaca 240 300 acaatacaac gttgactact ggaatataca gcatcgtgag gtgaggctga ccatgagtca ccataaatca tacctctata agacgtctca acccagtgat ctgcgattac acgagcggct 360 420 actaccaact tgagatctgc ncgtaaatac accagaataa cactccccta ctctgaatca 480 acatgagcgc cccctgtaaa tggagaggat aaaaaatctc tcattatata attaacacct tactataagg gaggcttaac caagacctcg ctctatagga caccacaaat aaacacaacg 540 600 gtacaactca caactcatgc gctattctgc ccacttctcc gcgtctcaat agagattcac gcagaagacg cctctccaga atacctcctt cgaatatctc tccctgatca ccctcttggt ggaatgtcat ggcaccggaa ccacaacaac atattctgag accacctccc ctcacacaga 720 780 gtaagagtgc gcggtgatct tccatactct aaataccgta attgaaatac ttctggcaaa aatacaatta gcatacactg ctgcagactc tatacanaga catattatcg ggcgtcctat catcacctct cacgagtgtg ttctgggtca catcaagat cattatatag catgacaaac acatggcggc caccaaacta cccttatatg aaccacctct accgcgaggg cgggctattg 960 tcatttatct cacagacata gtactacaat tcttatatcg ctcagacata cagacaactc 1020 acctacgaat cacctccatc taatatcaag cacgctacta taccctacga tcatcgcaat 1080 1104 gtatactatc atagtacata cacc

<210> 5208 <211> 481

<212> DNA

<213> Glycine max

<4.00> 5208

agcttctcc ccaatttct ataaataggg ggagaagtga agtgaaaaag ggttcagccc 60 cttaggcact tctctcttt tcgaatttgc ttggaaaaat tgtttccggg aagaaaattc 120 aagccgaggc gcttccgaaa cgtttccgtg aggaatttcg caaaagtttc gaccgttctt 180 cgacgttctt cattcttct tcgatcttca acgggtaagt acctcgaacc aagcttttcg 240 attcattata tgtacccgtg gtggtccaca ttgtgtttcg tgtattttta ttctcgtttt 300

| | | • | | | | |
|-------------------------------|---|------------|------------|-------------|------------|-----|
| atttactttt | tatacccctt | tttgacgtgc | ttaagccatt | ttatttaagt | catttatcgc | 360 |
| ttagactaaa | aataaaataa | atttccaccg | atcgtttgaa | ttattttatc | cgttaacttc | 420 |
| cggttaaaac | caattccgac | cgtttggtcg | tgccctaacc | cccgttggga | accaaaaaag | 480 |
| a | | | | | | 481 |
| <210> <211> <212> <213> | 5209 287 DNA Glycine max | ×. | | | | |
| | | | aaattattat | accentacaca | agestages | 60 |
| | | gggccccttc | | | | |
| tctgttcttc | ctttccgaga | tatttttcct | tatgtcagct | tgcgtaggtt | tatagcctaa | 120 |
| cccaaacttc | ccgcgatttc | ctctggtgct | taccaggctg | gttctgccgc | cgttgttctt | 180 |
| gcccaaaccc | attacgggct | cgtagccgta | ccccaacatc | acccgggcca | ccatcattgc | 240 |
| cgtatcatat | aggcaaggct | gcccagagag | ggaatctacg | gaggcaa | | 287 |
| <210> <211> <212> <213> <400> | 5210 376 DNA Glycine ma: 5210 | x | | | | |
| agctttgagg | gtgcgtagcc | caccatcttt | tcatagtaga | gtatcgataa | tgggtctacc | 60 |
| | | | | | caaaaccctc | 120 |
| caccttttgg | gcgtgttctt | tgaaaaatcc | gtcccccttt | ttgcaaatgt | tctgtagttg | 180 |
| catectatee | ggaaccatat | caaaattgta | ctgatactgc | ctaacaaaag | caaccattaa | 240 |
| gtccttccaa | aaatggactc | gggaagattc | caagttagtg | taccaggtaa | cagctacccc | 300 |
| agtaagactt | tcttggaagg | aatgtattag | caattcctca | tcttttgcgt | attcccccat | 360 |
| cttctgacaa | tacatc | | | | | 376 |
| <210> <211> <212> <213> | 5211 289 DNA Glycine ma | x | | | | |

| <400> | 5211 | | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tctcccccaa | ttttctataa | atatggggag | aagtgaagtg | gaaaagggtt | cagcccctta | 60 |
| ggcacttctc | tctctttcga | atttgcttag | aaaaattgtt | ttcgtgaaga | aaatccaagc | 120 |
| cgaggcgttt | ccgtaacgtt | tccgggagtg | atttcgcgaa | ggttttcgac | cgttcttcga | 180 |
| cgttcttcat | tcgttcttca | tcgttcttcg | gtcttcaacg | ggtaagtacc | tcgaaccaag | 240 |
| ctttccgatt | cattctatgt | acccgtggtg | gttcacattg | tgtttcgtg | | 289 |
| <210> <211> <212> <213> <400> | 5212 472 DNA Glycine max | x | | | | , |
| , | tgcatgtggg | tacctatttt | gaatctccta | tgctgtctca | taaaatagtc | 60 |
| | | | | ggggcatttc | | 120 |
| | | | | ggcaatgtgg | | 180 |
| | | | | | tcaagaaatc | 240 |
| | | | | | caatttagag | 300 |
| | | | | | tgaatactta | 360 |
| | | | • | | agtggcttat | 420 |
| | | | | aatgaagggg | | 472 |
| | | | | | | |
| <210> <211> <212> <213> | 5213 285 DNA Glycine ma | x | | | | |
| <400> | 5213 | | | | | |
| ttgattcttt | tagtgtgagt | gaattggtca | tttcattact | attgttctat | tctttgtttt | 60 |
| gacatgcata | tccttgaatg | aattctaaaa | tttatgaaaa | gatgagactc | tataggcttt | 120 |
| cttgagacct | gtgaattatt | ttgattagtt | tttcccctag | tcgatcactt | tgaggatgaa | 180 |
| tgattattt | tttttgtcct | taaactatat | tgtgtgattt | atagatgcga | ggaaaaaagg | 240 |
| gaagtaatac | acattgcagg | ı ttgtgtcagt | gaataaatco | : tacat | e. | 285 |
| | | | | | | |

| | · | |
|-------------------------------|--|-------|
| <210> <211> <212> <213> | 5214 232 DNA Glycine max | |
| <400> | 5214 | |
| gccctatagt | gagtcgtatt acaattcact ggccgtcgtt ttacaacgtc gtgactggga | 60 |
| aaaccctggc | gttacccaac ttaatcgcct tgcagcacat ccccctttcg ccagctggcg | 120 |
| taatagcgaa | gaggecegea ecgategece tteccaacag ttgegeagee tgaatggega | 180 |
| atggcgcctg | atgcggtatt ttctccttac gcatctgtgc ggtatttcac ac | 232 |
| <210> <211> <212> <213> | 5215 493 DNA Glycine max | |
| <400> | 5215 | |
| agcttggaag | ccaaggcctt gaggtttgtt tttatgttgt tggattgatt ttatatcctt | 60 |
| cattcatatc | atggctctga gttggtatct tccttgtctt gtgtgaatca tttttggctg | 120 |
| taaggtttcc | aagttgggat tegggtgtat gggeetgaee aaagtgtaea atgateetgt | 180 |
| tcctaaagag | gttggcatct ctttgatcaa atacacattc agtaaaggga tcactttctt | 240 |
| tgttactgta | gatttttatc gaccccatgc caacaaagtt ttggtcgaaa aggttaatta | 300 |
| ccttaacact | ttgtaacata tttgtttcac tttaacaata acaacccata atataatgta | 360 |
| acataacatt | ttaattaact ctgaggtggt caggggcttg cctcaagatc aaattcagat | 420 |
| tcccccaaag | g tttggtattg tcaaaatgga taatggtaat gtgatagtga accggttccc | 480 |
| ctgaatatgt | ctg | 493 |
| <210> <211> <212> <213> <400> | 5216 285 DNA Glycine max 5216 | |
| tataagatat | t agttaattta attgaaagaa tttgataaaa ctaattaata agttaactga | 60 |
| tagatattaa | a atagcaggac atatctaata tttcaaatat ttaaaattta tttctaataa | . 120 |

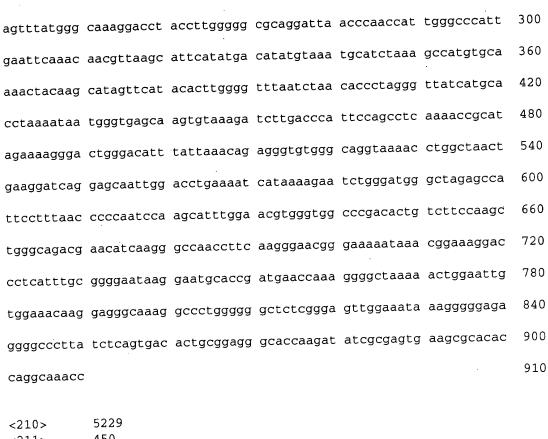
| atttttttac | aggaataagc | ttatggaatt | tcattaggaa | ttaaatcata | taaacaatac | 180 |
|----------------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-----|
| aagagaaagt | atgataataa | attaaattga | agtcaagaat | gggatggtgt | taccctaacc | 240 |
| acgattatga | gcaacaactt | atcatcttaa | aaaaagtaag | ataat | | 285 |
| <210> <211> <212> <213> | 5217 341 DNA Glycine max | ς | | | | |
| <400> | 5217 | | | | | |
| agcttgagcc | gtactttctg | aagtcgctcg | acaatacttg | agaaaaagaa | tcggctaaca | 60 |
| gttgcattta | ttgtaacaat | gacaatgtca | tcaacaacaa | cagctataac | agtaacaata | 120 |
| acaacaatag | taatattagc | aaaacgaagg | ccatgtctcc | tgagccttat | cgggaggaga | 180 |
| gatcaagacc | caaaatgaaa | gagtcagcgg | gggtgtaaaa | aaaaaaaac | actatatgta | 240 |
| gagagtggtc | gatcgatgca | tgcatacata | ttatacatta | tagtttaaga | ctatgaacct | 300 |
| aattatgggt | agctccgcaa | ctctcaagaa | cttaataaat | g | | 341 |
| <210> <211> <212> <213> | 5218 277 DNA Glycine ma | × | | | | |
| <400> | 5218 | | | | | |
| tgacaccaaa | aaggtctaac | atactttaaa | tcacaccatg | ttgtgcttaa | cggttgagaa | 60 |
| tagctcttgt | tctttgtttt | atgcagcctc | tctttttgt | . aggtagcata | atgcttggcc | 120 |
| ttaactcaca | ctttttctta | ttgctttcat | tgctaaatac | taccctctgg | gatccgagat | 180 |
| cattaatcct | ttagctatga | gcctatggtc | gatcatgttc | gtaagctaca | tcttttctgg | 240 |
| ccctttatta | tttgtagata | . acattgttgt | gggtgta | | | 277 |
| <210> <211> <212> <213> | 5219 370 DNA Glycine ma | ix | | | | |
| <400> | 5219 | | | | | |
| agcttgcctg | tcttatgcto | : tgacgttgtg | g actcattaac | ttagtcatga | a aagaattcat | 60 |

| attccataat | ttaagatagg | accctatatt | tcagtaaaag | agggtcacgt | attgtaattc | 120 |
|-------------------------|-----------------------------------|-------------|--------------|--------------|--------------|-----|
| atggcacgaa | atgtctactc | gacaatataa | ccgccatgac | tcatgtgcaa | tcatatgcct | 180 |
| atctgacata | tatacaagat | ttaagttttg | cacacgatgg | ccatatttgt | gagacacaag | 240 |
| aaagattata | ttagtagtat | atgtgggaga | atgttagcat | atgaccatta | tgtatcgacc | 300 |
| cacctcatgt | ctacacctcc | acactctgat | agttgataat | ttcaattcct | ataaaaagaa | 360 |
| ctcccttaat | | | | | | 370 |
| | | | | | | |
| <210> <211> <212> <213> | 5220 283 DNA Glycine max | ς | | | | |
| <400> | 5220 | | | | | |
| tgatgtgcga | aagcgtggaa | tagtcagtct | tcctactttt | gattgttgac | cacagagtgg | 60 |
| tacctgtaga | tatgtccctg | gggtcatgag | accttgggga | ccttctgtgg | ggtgctattg | 120 |
| cccaaaacca | agcttgacta | ataccgagcc | aaccctggca | ttatctgatt | atgataacct | 180 |
| gtgacctacc | tagatgagct | agccctgtcg | gtctgcctat | ctgggagctg | agcccactaa | 240 |
| tcaaggaggc | ttgtgtggcg | gctggccagc | tatgtatctt | ggg | | 283 |
| | | | | | | |
| <210> <211> | 5221 389 | | | | | |
| <211> <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> <400> | unsure at 5221 | all n locat | ions | | | |
| agcttaggta | tggcttccaa | acacatcttg | aaagagctca | a acgatttgca | gaatgatcct | 60 |
| tttacgtcat | gcagataagc | ttctcgatco | : ttttttctgt | tttttttcgt | cttttttgtt | 120 |
| ggggtgtatg | taacaaaaac | tattatttgt | gattatatat | ttatatatt | attgcaatgt | 180 |
| gttatctaat | atatctaatg | taaaggagta | ı gtgtgtggaa | a atgtccaaaa | a tggacatctt | 240 |
| ttatcttaaa | tctagatttc | atttttaaa | ttcagacato | g agttttgatt | tagattatgt | 300 |
| tgtaacagtt | : aattaattca | aaatatgcto | ttttatgata | a atttttatti | gatnttcatt | 360 |
| cattttttag | g attttgttt | ttttcttta | | | | 389 |

| <210><211><212><213> | 5222 281 DNA Glycine max | | | | | |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-------|
| <400> | 5222 | | | | | |
| tcaacgaatt | tatcttatat t | tgatgtgga | ttacagttat | taagttgttt | gcgtcaagta | 60 |
| aactaaattc | gttaacttta a | tagcaacca | cgggatcaat | gtaatacgct | gttaactaac | 120 |
| ttcaatatgt | agtttaccag a | atgagtggt | aagaatatca | aactaacgaa | aatgatagaa | 180 |
| aatgacgaga | gaacttcatc g | gatccattgg | tattattata | ttgtataatt | tgataatccg | 240 |
| atggagctca | cagaatgata a | itttcatcaa | agttatttcg | t | | 281 |
| <210><211><211><212><213> | 5223 478 DNA Glycine max | | | | | • |
| <400> | 5223 | | | | | |
| agctttgata | ccagttgata (| caagtggttc | aaaaagagtt | gagtttattg | aagaaaataa | 60 |
| agaattttct | ttatattaga a | agaattcaag | gggttctggt | ccctcctaac | aatccaaact | 120 |
| acacactaaa | aaatataatt (| ctctaccagc | taagtttaat | aaaactcata | actttcctaa | 180 |
| caatctataa | cagattccca | cccatgataa | aaaccttcaa | actgtactaa | ccaacacttc | 240 |
| tgtttatttg | agcctcatca | ttagctcgcc | catccctcct | cctaacatag | acccttttaa | 300 |
| ttaaggttct | agtatcacaa | aaaaatactt | gtcaatgcca | aaaccaaact | tattttaagt | 360 . |
| aaacacttcc | acattgcttt | ttttctcaat | ttccagtcat | taacagtcta | tttggatgag | 420 |
| aaatttggaa | atttaaaaaa | tttaaaattt | taaattttta | attgctttaa | ttaatatc | 478 |
| <210> <211> <212> <213> <400> | 5224 279 DNA Glycine max | : | | | | |
| tcgcggaagg | ı aatgagcagg | aaagtttctt | ccgaagaggg | ggggcttttt | ataattttt | 60 |
| attaaaggg | aaaattgccc | attccaaaaa | attgttgggt | gcaccagcaa | tattgctgag | 120 |

| tgcacctagc | atctccctct | aggatttcat | ggtacaagag | aataaaacag | cccaatattg | 180 |
|----------------------------------|-----------------------------------|--------------|--------------|-------------|--------------|-----|
| agtaggcttt | gaagtcaatg | aagcccaata | ccatcttggg | cattatatat | ttccctcttt | 240 |
| gatatttgga | aattctgaat | tcatcacatc | accctattg | | | 279 |
| <210> <211> <212> <213> | 5225 440 DNA Glycine max | x | | | | |
| <400> | 5225 | | | | | |
| agctttagat | attagctgaa | agactcatgg | atgactttat | ctctaaaatg | caccctcatg | 60 |
| aaagagcccc | tctcacttga | agtgtggaat | tgtaccttat | gttgaaattt | gactttttac | 120 |
| atagaagaaa | gtggtgacaa | ggtcaaactt | ttgaccactg | gccgttgaag | ctttgatacc | 180 |
| aagattaaag | aaaatggttt | agagaaattg | tttgttaggc | agcataaatg | ttttagtatt | 240 |
| tacaaatcct | atttacaaaa | tcagagtact | tctaacttaa | cacaaataca | ataacttgta | 300 |
| tagtaatcag | taggcttaat | taattatact | tttggctcct | ttgtgatagt | caatgtgtga | 360 |
| tttttgtcct | cttataattc | tttgcagcaa | . tcaaatcctc | cattgtttcc | caataaaaat | 420 |
| acttttggct | cctttatgat | | | | | 440 |
| <210> <211> <212> <213> | 5226 276 DNA Glycine ma | ıx | | | | |
| <400> | 5226 | | | | | |
| tgcttctaca | tatgggttct | atcgcacaga | a atggcatgat | cactggctga | a catattctca | 60 |
| attagctctg | ttgcttttt | ggggtcttca | a gctttattt | teccctgc | a gaagcatcta | 120 |
| gcaatttctt | ggtttgtggt | t atcagcccat | ctataaacat | attcaattg | a attgtcttgg | 180 |
| aaaacctatg | ggtgggagtt | cttctcaata | a aacctctgaa | a cctctccaa | t gcttcactca | 240 |
| aagattcato | agggaactga | a tgaaatgaa | g agatta | | | 276 |
| <210> <211> <212> <213> | 5227 969 DNA Glycine ma | ax | | | | |

| • | | |
|--------------|--|-----|
| | unsure at all n locations 5227 | |
| attagcacac a | atcccaccta ctataccccc ccgctcggac cttganttcg tgtgacccct | 60 |
| tcccanaccc (| cgaaccgctg acaacaagcc gcaaggcgca agcccaagaa accagcatgt | 120 |
| atacagaggg 1 | tctttaaggg gatgtcgttt agcgcaggaa aaaaagagga tcttttttta | 180 |
| tacttaaaac (| caatccatag ggggtcaggg tccctactca acaatcgcac agtgaccacg | 240 |
| gccgccgata | ctttccctcc cacccacccc gaggttgatg agcaactcaa cacctgccct | 300 |
| cacaccactc | taggcctctt aacacacccg ggaacgaaac cgttccgact gaacctaaaa | 360 |
| ccccgcttca | tgcccaacag gagccccacc aaatatacgt ccccgatccc ccaactgcga | 420 |
| gccaacagcc | cctttccatc agggtacgcg acttcacaaa aaaaatactc tgtcgaccgc | 480 |
| cccacaagcc | aaacttattt atgagaagac accatccaca atagcctgcc ttcgggcctt | 540 |
| tccaagccac | cacaggtete teaeggatga cageaceeg ggaeatttaa ggaatgeaae | 600 |
| actgccctga | ttaaaagagc gcctctcccg atgccttccc tagacacact accatagctc | 660 |
| ggagaaacag | agacacccgc caaagtgtaa aacaacccac ccccaatggg ggaaaatacc | 720 |
| ctccgcacca | agactcgtct taaaacaccc ccccgctctc atctcatcgg gccagcccac | 780 |
| caaggccctc | tcaacccgcg gacacaaact ccgttccggt cctcaccacc acaaacgagt | 840 |
| acagcccggg | cgcatcaagt tcaccccaat accctcctca cgaccgctgc ccgatgacat | 900 |
| gcgatagcat | acgcgtagcg aaacacaccc ctttgttcag cgcaccaaga ccaacaacac | 960 |
| cgcctcccc | | 969 |
| | | |
| <210> | 5228 | |
| <211> | 910 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <223> | unsure at all n locations | |
| <400> | 5228 | |
| tgcgcttcta | gaatcacgac agttacatat actctccaac cgctacgggg nantttgaat | 60 |
| ttgatagaco | natgeteegg caceegggga tacetnanaa gaaggaeetg cagggetgee | 120 |
| aacctttata | a taagcactcg gccacttaga ctatttgcag taaaaatggg cacaaaaatt | 180 |
| attcgcacga | a gatacgtaac ccaattattt aggtatccca agtatagcaa ccaagaagcc | 240 |



| 5229 |
|-------------|
| 450 |
| DNA |
| Glycine max |
| |
| 5229 |
| |

agcttatttc tttatgttca tcgatcccta ttctataata tgggtctttc taactaaccc 60 tgtaaattta attttacaat ggatgtaaag gccattcgaa atctagtagg ctaattttt 120 ataatgaact aatggacaat tgtactatga tactactact tgataaattc ataacccttc 180 acaaacaatg tttctgctga cctaagcatt aacagttaaa gaggtgattg atatatacat 240 cactgatcaa ttcaaatttt tctccaaaac aaaatctgaa tcttatagca acacataaca 300 360 tgtatataaa tttatattca ttcttggtga taaaacttga agaacattta ataaatttac tccatgcgac aaataaactc aaacttttgt agcttataaa ctgcaagcat atcatgctca 420 450 atttatggtg gcaaaagcat gtctttcaca

<210> 5230 <211> 287 <212> DNA <213> Glycine max

| <400> | 5230 | • | | | | |
|-------------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-----|
| tatgaacctc | gcgtatttga | tattaagcta | aaatggaatt | acggactctt | ttttatattc | 60 |
| gaggctttag | gttaatttag | tcccttgagt | tgaattcttt | ttttacttta | gtcccttata | 120 |
| attttctatt | agatcaaatt | ggttcttctt | ccgtgaattt | atcgcattag | tttggacaac | 180 |
| ttaaactgta | gcatacatca | cttcatgcaa | agtcgatact | tttagtgcca | tagtttaaca | 240 |
| tggatgctaa | aaggacaacg | cgaaattttt | aacacttaag | agatcca | | 287 |
| <210> <211> <212> <213> <400> | 5231 434 DNA Glycine max | ĸ | | | | |
| | | tcaatgagct | gcataatgag | gggaaaaagc | aattttcctg | 60 |
| | | | | agaattgaga | | 120 |
| | | | | | aatatttgcc | 180 |
| | | | | gattgtgaag | | 240 |
| * | | | | | aagaagtatt | 300 |
| | | | | | gataaatttc | 360 |
| | | | | | | 420 |
| | | Clactagaty | caccygycya | cgcagcgaco | tttgtaagat | 434 |
| gaactactct | tttg | | | | | 101 |
| <210> <211> <212> <213> | 5232 285 DNA Glycine ma | · · | | | | |
| <400> | 5232 | | | | | |
| tggagaggat | gcttcaatgg | aggaaaagaa | agagggagag | g aaagagagag | gggggagcac | 60 |
| gaaattgaag | gaagaaaaag | ggagagaagt | tgaactttga | gttgtgtctd | gcaagactct | 120 |
| cattcatcaa | agttacaaca | agtgttacac | atgcttctat | ttatagacta | a agtatcttcc | 180 |
| ttgagaagct | : ttcttgagaa | a acttcctto | g agaagcttct | ttgagaaaa | c ttccttgaga | 240 |
| agctagagct | : tagctacaca | a cacccctcta | a ataactaago | c tcacc | | 285 |

| <210><211><212><213> | 5233 1099 DNA Glycine max | | | | | |
|----------------------|------------------------------------|-------------|------------|------------|--------------|------|
| <223> <400> | unsure at a 5233 | ll n locati | ons | | | |
| gggatacaga | gccatttgaa | acntgtttga | taacggtagt | aatacagcga | gattttggaa | 60 |
| agaacctcct | tttggaacat | gtaaaaggca | agaacttatt | ttctaaaaca | atgcggtgaa | 120 |
| gacaagcaga | catgtgtagc | gcgtgtgtat | tttcttatat | gtgagaaatg | ggagtttccc | 180 |
| ctcattagcc | tatcccccaa | taagaagagt | gtggggtaaa | ataatggtta | tgggaggata | 240 |
| tactgtttt | cttaggggag | ggaacaaatt | tgggaataat | atggtaagaa | aggcgtcgtt | 300 |
| | ttatggaatt | | | | | 360 |
| | atggttgtga | | | | | 420 |
| | agttattgcg | | | | | 480 |
| | tttggttact | | | | | 540 |
| | ttttaaatct | | | | | 600 |
| | | | • | | ggggaagaaa | 660. |
| | gtttatttta | • | | | | 720 |
| | | | | | agaaaatgcg | 780 |
| | | | | | aagcgaaacg | 840 |
| | | | | | aatgggtatg | 900 |
| | | | | | gggaaaagaa | 960 |
| | | | | | atagtattcg | 1020 |
| | | | | | ı tagtggtgta | |
| • | | · | , | | | 1099 |
| agrgadagrg | g tatactaat | | | | | |
| <210> | 5234 168 | | | | | |

| <210> | 5234 |
|-------|-------------|
| <211> | 168 |
| <212> | DNA |
| <213> | Glycine max |
| | |
| <400> | 5234 |

| tataatatat | cgaggcgctc (| gaaattgaac | aacggaagct | cttgagaaat | tcaaatggtc | 60 |
|----------------------------------|-----------------------------------|------------|--------------|--------------|--------------|-----|
| | actcggagtt (| | | ٥ | | 120 |
| | | | | | | 168 |
| caacggaagc | tctccaaaag 1 | ttaaaatggt | Cataaytett | cacaccga | • | |
| <210> <211> <212> <213> | 5235 461 DNA Glycine max | | • | | | |
| <400> | 5235` | | | | | |
| agcttatgcg | catacttctt | tacgaacgtt | cacttgcaca | agacattctt | ataactaaga | 60 |
| aaaatgcacc | catatacaat | caaggcacct | tcgttaccta | gattatttat | atgtacttcc | 120 |
| aaggtgtatt | tgttacctac | atcacacgca | tttcctttgc | taaatttaca | tacatgctta | 180 |
| ctcaaagcac | tttggctatc | aaaattgcat | acgtgcacat | tctggtattt | ctaatacctg | 240 |
| tacatacaca | aacttcatga | tgaatcttga | ctatctacac | aataaggtgc | tacatttcat | 300 |
| gctttttttg | aagtgctttc | actacctaaa | gccgcatgca | aattcaagta | tattttcttt | 360 |
| tgccgattaa | aattgtattc | aaattaaaag | gtatttttgt | aaggtatttt | ctttacataa | 420 |
| catgcaacat | atatatttt | tttgtgaaac | attttgacta | t | | 461 |
| <210> <211> <212> <213> | 5236 282 DNA Glycine ma | x | | | | |
| <400> | 5236 | | | | | |
| tgaaattgaa | catcagaagc | tctcgacaaa | a ttccaatggt | : cataacttgt | cacaaggaag | 60 |
| tccgattctg | gcgcatcaca | tatcgagacg | g ctctaaatto | g aaaaccggaa | a gctctcgaga | 120 |
| aagtcaaaag | gtcataactt | gtctcacgg | a agtcagatto | gggcgcataa | a tatatcgaga | 180 |
| cgctcgaaat | tgaacaacgt | atggtctcg | a gaaattcaa | a tgttcataa | c ttgtcacacg | 240 |
| aaagtccga | tcaggcgcat | aatttattg | a gaagctggaa | a at | | 282 |
| <210> <211> <212> <213> | 5237 468 DNA Glycine ma | ıx | | | | |

| <400> | 5237 | | | | | |
|-------------------------|-----------------------------------|-------------|-------------|--------------|--------------|-----|
| agcttcttta | aagccatcgc | ctacaaagac | acatccaact | aaaatttagc | ataaaaatta | 60 |
| tttcgcatga | gatacataac | catattattt | tagttatccc | aagtatagca | accaagaagt | 120 |
| caatttatgc | gcaatgtacc | taccttggtg | caacaagatt | aaccaaacaa | ttaggccaat | 180 |
| tcaattcaaa | caactttaag | cattcatatg | acttatgtaa | ttgcatctaa | agcaatgtcc | 240 |
| aaaacttcaa | gcttagttca | tacccttggc | atttaattta | acaacctaag | tttatcatgc | 300 |
| acctaaaata | atggttgaac | atgtgtaaag | atcattaccc | attcaagctt | caaaatcaca | 360 |
| tagaatagtc | attgtgacat | ttcattaaac | agttggtgtg | tgcatgttaa | aacatgtata | 420 |
| aatgagggga | taggagcaat | atgacatgaa | aattcataaa | agaatcat | | 468 |
| <210> <211> <212> <213> | 5238 285 DNA Glycine max | ĸ | | | · | |
| <400> | 5238 | | | | | |
| tatgaaacaa | caccttttct | gtctagaaat | tacagataat | gccaagtaat | tatagaagga | 60 |
| gcactttcat | ttctattata | aaacttgtgg | ataaagcata | atagtacatg | aaatgaataa | 120 |
| cccaccacta | gtacaaattc | atcccatgaa | tatattgcca | acccaaaact | ttcaacttct | 180 |
| tgcttttgtt | tagggttaac | ctttccgaag | cttacaattg | , ttgtaacaaa | . gacataaaaa | 240 |
| tgaatgcttc | tttctaaagc | acaagcattt | taggaaagaa | a aggag | | 285 |
| <210> <211> <212> <213> | 5239 407 DNA Glycine ma | x | | | | |
| <400> | 5239 | | | | | |
| | | | | | a aaaataataa | 60 |
| | | | | | a agaataaaag | 120 |
| | | | | | t taatgtttta | 180 |
| | | | | | a caaatttttc | 240 |
| aaataatta | a aaaactaaaa | a attaattaa | a atgttttat | t aaacataac | c taataacact | 300 |

| cattaataag | acactaaatt taggcttttt tttacgttaa tggtgtaatt tttttcaaaa | 360 |
|-------------------------|---|--------|
| attaccaaaa | ttaatacctt ttgaattatt tatgaaagga ataaatt | 407 |
| <210> <211> <212> <213> | 5240 285 DNA Glycine max | |
| <400> | 5240 | |
| tggaccgttg | gacgtgcatt gcatgaaaat aattagtata aaaaactaac tgatcgctat | 60 |
| aaacatagtt | tggaaaaaca aaaaggaagc atcattacgg catgtgcaat gcattatatt | 120 |
| aaaaatagga | caaaaatata tttttgatta ctatattttc atcaaatctt attttattc | 180 |
| tttaaacttt | tatattctct aatttgatcc ctaatttttt ttttaaacaa tgtttttage | 240 |
| tatttttcac | agattttcat taacaatgtt aacttgagtt gtgtc | 285 |
| <210> <211> <212> <213> | 5241 438 DNA Glycine max | |
| <400> | 5241 | |
| agcttttttg | g taatggatat gattttcact aacaaatatg gttaaacatt agactttga | a 60 |
| tgtatcatco | c aacgagtgca aaaaccaact tatttaaaat caaatgtgga ctatcgtcc | a 120 |
| atgctagtaa | a aacagagttt tcaaaaaagt tttcaagtgc agacttgtgc aacaaagtg | t 180 |
| atcaaaatca | a acacaaaaga atactaatca agtagcttta gagagaagta gaaacactt | .g 240 |
| gatttataco | c aattcactca aacaaagcta tgtctagttt tcctttgcaa atcaataaa | ıg 300 |
| ggttctacta | a atcaaaactt gattacaaca agtctatgta ccaaaagcga gtatttttc | a 360 |
| gcctctatgo | c attggcgaat atttttccac caatactcag cttctttcac caaaatata | at 420 |
| gtaccaaaaq | g caactttt | 438 |
| <210> <211> <212> <213> | 5242 195 DNA Glycine max | |
| <223> | unsure at all n locations | |

| <400> | 5242 | | | | | |
|----------------|-------------|--------------|--------------|------------|--------------|-----|
| tgaaggtagg | agaagatgag | tggagggaga | gggagtgaag | aggcacgaaa | ttttatgcct | 60 |
| caaatgaggt | ctgaactttg | aagtgtaatt | ctcaaatgat | caaagttaca | acaagtgtta | 120 |
| cacatgcttc | catttatagc | ctangtagct | tccttgagaa | gcttccttga | gaaacttcct | 180 |
| tgagaagctt | ttttg | | | | | 195 |
| | | | | | | |
| <210> | 5243 | | | | | |
| <211> <212> | 418 DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <400> | 5243 | | | | | |
| agcttcaaaa | ggacattagc | aacttcactc | aaaatgaaca | agagaactct | tcagaagcct | 60 |
| gggaaagatt | ccaagagtta | ctcaggagtt | gcccacatca | tgggtttaac | cagtaaagga | 120 |
| tagtgtacat | ttctatagtg | gagtgtcctc | tcacaacatg | actggccttg | atgtatgtca | 180 |
| aggcaatttg | atcatgaagc | caaccgttaa | tgccattata | atcattgaag | atatgtgctc | 240 |
| aaatccctat | cacaattatg | gggttaggag | aatcatgaag | acgctcgatc | aaccaggtgg | 300 |
| aaactgaagc | agctactttt | ggccttggac | gatagattta | agcattgtcc | aagaaattca | 360 |
| gagttgaatg | aaagctaagt | ctcaagtgcc | tatctctaca | cctcccaato | acacttgt | 418 |
| | | | | | | |
| <210> | 5244 | | | | | |
| <211> <212> | 281 DNA | | | | | |
| <212> <213> | Glycine ma | ıx | | | | |
| <400> | 5244 | | | | | |
| | | | · aaadetteaa | gttgattaat | tetecategt | 60 |
| | | | | | | 100 |
| | | | | | ttaatcaaga | 120 |
| | | | | | tggggaaaaa | 180 |
| taatattaac | aatgaatata | a ttatggatct | atttcttagt | gaccgacate | g tctacaaatt | 240 |
| ctataaacto | ttctcagtaa | a taattaatat | geceetgate | c g | | 281 |
| -210- | 5245 | | | | | |
| <210> <211> | 439 | | | | | |
| <211> <212> | DNA | | | | | |
| | | | | | | |

| <213> | Glycine max | ĸ | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5245 | | | | | |
| agcttctata | tgaccaaccc | atactttccc | atgcccttac | aaaactctct | agtgataaac | 60 |
| tactttgcat | gtgtcatccc | tgaaaacaaa | aagaaaggca | tattgataaa | ggcatcaaag | 120 |
| tatgaatgca | caaaccaacc | ttttcaacat | agcaacgagt | gagaaggatc | acaaaacaaa | 180 |
| ggcatccgtc | gtccaaacta | tttgagttac | acgaaaaggc | aaattattga | ttcaaagggt | 240 |
| gtacacaaca | atatagagta | tttgacgaac | atggattctt | tttaaagtga | tagatgcgag | 300 |
| taggttttga | aaggggaaac | agttcttttg | aaagtatgat | aaagcgattg | aatagcttta | 360 |
| ttactaacaa | aagccaaatg | caaccgtaga | aggatttgaa | aaaaaattaa | caatgaaaag | 420 |
| aaagtcattt | attgttaaa | | | | | 439 |
| <210> <211> <212> <213> | 5246 276 DNA Glycine max | c | | | | |
| | | gcataacaaa | ctcgttgaaa | ttagttgcaa | cttgtaactg | 60 |
| | | | | acttttttt | | 120 |
| | | | | tttgttggag | | 180 |
| | | | | cacgtgcttt | | 240 |
| | cgagttcatg | | | | | 276 |
| <210> <211> <212> <213> | 5247 419 DNA Glycine max | ς. | | | · | |
| <400> | 5247 | | | | | |
| agctttacta | gtgttccaag | acatgatgtc | tgctggagaa | tgtccaaact | atgtaacctt | 60 |
| cattggggta | ctttctgctt | gtgttcattt | agctcttgta | caagaaggat | tctactattt | 120 |
| tgatcagata | atgaagaaat | ttgacgttga | gcctggactg | gagcactaca | catgtatggt | 180 |
| tgcacttttg | ggtagggctg | gtttacttga | tgaggctgaa | aactttatga | agacaacaac | 240 |

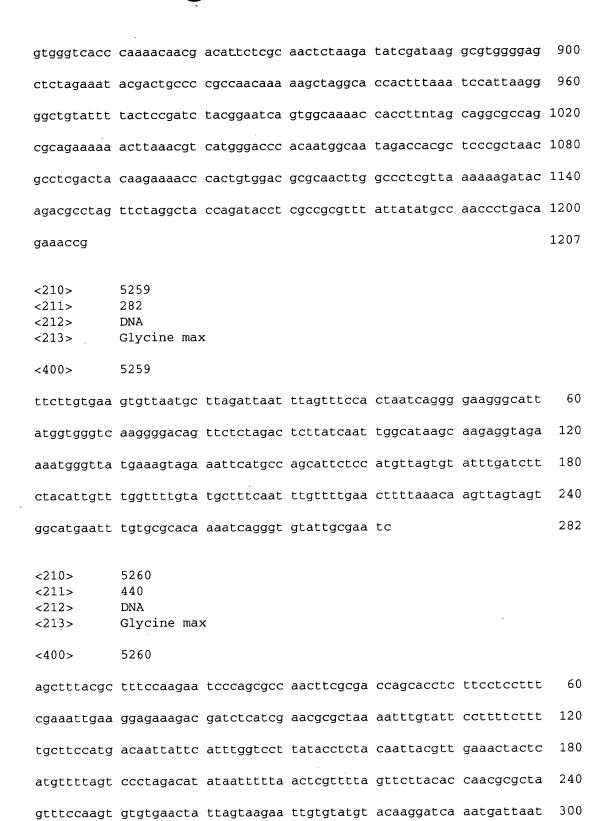
| acaggtcaaa | tgggatgttg | ttgcgtggcg | tactttgctt | aacgcgtgcc | acattcatcg | 300 |
|-------------------------|--|--------------------------|--|--|--|------------|
| aaattacaat | ttagggaaac | aaattacaga | aactgtgata | cagatggacc | ctcatgatgt | 360 |
| gggaacatat | acattgctat | caaacatgca | tgccaaggca | aagaaatggg | atggagtgg | 419 |
| <210> <211> <212> <213> | 5248 275 DNA Glycine ma: | x | | | | |
| <400> | 5248 | | | | | |
| tgtaagttag | ttgtgtacct | attatcactc | tgcatatgtg | aaaattattc | tttgaaattc | 60 |
| tgaatgtggt | ttcaaaaagg | tttcaaggcc | ttggtgggta | tccaaaatgt | tgtatctctg | 120 |
| atcgattagg | aatcagaatc | aagaagcacc | aaactacaaa | ggaagcatgg | gaattgcttc | 180 |
| aattggagtt | tcatgatact | gatagaacta | ggctcaaggc | ttaaattcaa | ggaactgagt | 240 |
| tcgaagatga | aagagagata | attttçagag | ttttc | | | 275 |
| <210> <211> <212> <213> | 5249 950 DNA Glycine man | x all n locat: | ions | | • | |
| <400> | 5249 | 111 11 10000 | · | | | |
| gaacgaggct | atcgaaaaca | cgctattgaa | tatcctctcc | ctcaacgcca | acggccacca | 60 |
| ttgacaccgt | ggnaggcaac | acactacncg | cngacaccgg | aatagaacag | caagcaaaca | 120 |
| ccacgcacat | cgaactgtta | agtaaaccaa | ctttctattc | acccatgcgc | cgaccaaaac | 180 |
| acgcgaaggg | agaataacag | ccttgttttg | gtgtcggccg | cctgcccacc | acaccgcaaa | 240 |
| gggcccataa | gataaagggc | agaaaccggt | taagtacaca | aaccaaaccc | tttaacaaag | 300 |
| caaccatcga | | | | | | |
| | gaaagatcac | taaacctcgg | ggtacgccgc | cccaacccat | cgtgtgcgga | 360 |
| aaaagccaac | | taaacctcgg aaaggcggac | | | | 360 420 |
| | ggctgattca | | acagcaatat | acagatgtag | aaaaaaacgg | |
| ggtcctgttt | ggctgattca aaagggaaca | aaaggcggac | acagcaatat ggccgggaat | acagatgtag ggggaaacat | aaaaaaacgg cccttttaaa | 420 |
| ggtcctgttt | ggctgattca aaagggaaca agcaagcgca | aaaggcggac aatgcgagta | acagcaatat ggccgggaat actaagcaag | acagatgtag ggggaaacat aaacaaaagc | aaaaaaacgg cccttttaaa aagcgtgaca | 420 480 |

| agaccgcaca | agacaaacga | aacgtacaga | gggcgggtac | ttaaaaaacc | cacctctgag | 720 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ccgacaagaa | tcccacccaa | gcacagaaac | tccaccacgc | gacagttgga | atcagaaaag | 780 |
| aggccttgaa | aacgccaaat | gcaacaggcg | cattgcaccc | cgcgctcgca | aaccccagcc | 840 |
| tacaggagct | atcgcaccgt | aagacaccca | ttcatatcct | ttacatcgaa | caccgcacgg | 900 |
| acaccaaagc | catccaacac | ccaagctacc | gtgtagcccc | acgaacgccg | | 950 |
| <210> <211> <212> <213> | 5250 429 DNA Glycine max | . | | | | |
| | | | | | | |
| agcttgcttc 0 | tacatggaga | tgtacatcaa | gtccacttag | tacaaaattt | ggcttatcat | 60 |
| cacaaatgat | gatattccca | tcctaaatta | aaagcacaat | gggcagatgc | tgatctggcc | 120 |
| actatggaac | taaacacaag | agctagatat | acactagtat | gtgctctata | taaaaatgag | 180 |
| tacaaaaaga | tctgttggct | taaaacaagc | aaagagattt | gagactcatt | aagcacaaac | 240 |
| tacaaaggta | caaaatatgt | cagacttaga | aaggctgcaa | ctctaactag | acattacgag | 300 |
| aagttctcca | taaaagaagg | agaatttgtg | gatgacatgt | ttgagagact | gcaagttatc | 360 |
| ctaaacaatc | tataagcttt | gggacaagcc | tataccaagg | ctcaaataaa | cttgaaagtt | 420 |
| ctagacaac | | | | | | 429 |
| <210> <211> <212> <213> | 5251 285 DNA Glycine max | ¢ | | | | |
| <400> | 5251 | | | | | |
| tgccacccag | ctcgcccagg | caagccaggt | tgcatcttcc | aaaagcaact | gccttctgga | 60 |
| ggaacatcct | ggaaagccta | ttgggcctgg | tttctatttt | tacccttttt | tagtaaatac | 120 |
| acccccattt | gctttttttg | gtgattattt | ttctgtaatg | ttacaaaact | ttacgaattt | 180 |
| cgtaacgata | cttgttttat | tttcgtaaag | ttacggaacc | tttcgggtca | tgtaattact | 240 |
| ccttttttag | ctttcggaat | gttacggaaa | ctcacggatt | gcgta | | 285 |

| <210> <211> <212> <213> | 5252 440 DNA Glycine max | | | | | |
|-------------------------------------|--|------------|-------------|------------|------------|-----|
| <400> | 5252 | | | | | |
| agcttgcagt | gattcactct ga | atgtgtgtg | gcccatttga | aatcaaatct | catggaggta | 60 |
| acttgtattt | tgtctctttt at | tagatgact | ttacaaagaa | aatgtgagtt | tacctattac | 120 |
| aaagaaagag | tgaagtattt gt | taacattta | aatcattcaa | gttactagtt | gaaaaagcaa | 180 |
| tctggttgtt | caatcaagat go | cttagaact | gatggtggag | gagagtacac | ttcacttgaa | 240 |
| tttgagaatt | tctacaagga ag | gaaggaata | attcatgaag | taatggctcc | atacactcct | 300 |
| caacacaatg | gaactgctga ga | agaaagaat | agaatagtgc | aaaatatggt | tagatgcatg | 360 |
| ctgagaaaga | agcatcttcc at | catgatttt | tgggcaaagg | cagtatccac | aacttctcac | 420 |
| atcttgaata | gatgtcctac | | | | | 440 |
| <210> <211> <212> <213> <400> | 5253 288 DNA Glycine max | | | | | |
| tgtcgaaaag | gcaaagccgt tt | tacaaact | gctcaagaaa | actgagccct | tcctgtggga | 60 |
| cgagacatgt | gaacgagcct to | cctggcttt | caagaaaacc | ataactacac | caccgatcct | 120 |
| gagtcggcct | aggctaggag ta | acccatact | cctatacctt. | tcaataacta | acaaagctgt | 180 |
| taactcgacc | cttctgcaag ag | ggaagggaa | gcattaactc | cctatctatt | tcaccaaccg | 240 |
| catacttcat | gaggccgaga ag | gtgctacca | aatgatagaa | aatatggt | | 288 |
| <210> <211> <212> <213> <223> <400> | 5254 441 DNA Glycine max unsure at all 5254 | l n locati | ons | · | | |
| agcttgaatn | tgagaataaa aa | atcataaga | cattaagttt | ctcttggcct | agaagtcaga | 60 |
| tgcaaattca | gtagaacaga ta | aatatatg | atgctctaat | ttacaaaacg | aaataaaaaa | 120 |

| aataaattgg | ctttcatgtt | gattgtaaac | cttttgagtt | tggacactta | cacattctgg | 180 |
|----------------------------------|-----------------------------------|---------------------------------------|--------------|------------|-------------|-----|
| tgaagctgac | aaatgcagta | tatgtagccg | aagacaaggc | aggcaaaaga | aacattggca | 240 |
| aaactcggat | tgccctcatt | ttccaattca | tatccattga | tcttgttgtc | ataatagcat | 300 |
| aacctacagc | aatgacctga | aagttgaaac | cattttaagc | aaaatccatt | tataaaaaca | 360 |
| ccctcaataa | tcaataagaa | tatattaatt | tgtcagagaa | aaaatttaaa | atttcagtta | 420 |
| accctccatt | gtcactcaat | a | | | | 441 |
| <210> <211> <212> <213> <400> | 5255 289 DNA Glycine max | ς. | | | | |
| | | | . | . | *********** | 60 |
| | | | | tcggaagttt | • | 60 |
| | | _ | | tcacttaaaa | | 120 |
| ttatttgaac | aaattaaatt | ttttaattta | attaatcatt | aaatattaaa | taatttcttt | 180 |
| aacaaaaatt | aaaatattta | tttgtgtatg | atctcataag . | ttcaatttaa | gccgataata | 240 |
| tattaattaa | attaatatat | taatcgagat | agacatctag | taacatttt | | 289 |
| <210> <211> <212> <213> | 5256 479 DNA Glycine max | · · · · · · · · · · · · · · · · · · · | · | | | |
| <400> | 5256 | | | | | |
| agcttgccct | gtcctatcag | gttctaagga | tcaaaccatt | tcccaatgtt | gagtgatcct | 60 |
| aactaagcat | gcaagtgctt | gatcaaggca | aaggcacact | agaattaagt | actgatagca | 120 |
| cagtgaacac | ataaaacatc | attagataga | tatgaaagta | tttaaatcaa | gtaccccata | 180 |
| ggaagaacca | actgaggctt | tagctctcca | tagcagggaa | gcttccttta | caacaatgag | 240 |
| aagagaagat | gaaagataga | agaaatacaa | gtagtgggga | tgtctcctcc | acctctagaa | 300 |
| acctcacaat | ctcatccaaa | gctcccttag | atggcttcct | cttcaagctc | agctctctct | 360 |
| tagtctctcc | acaaccaaaa | actctaaaaa | aactcaactc | caccaccgat | ttcagcttaa | 420 |
| ataggcaatc | ctatcggggg | atgcgcgctt | agcaaaaaat | tagcttgctt | accgcatgt | 479 |
| | | | | | | |

| <210> <211> <212> <213> | 5257 289 DNA Glycine max | ς | | | | |
|----------------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| <400> | 5257 | | | | | |
| tatcagaaca | acatttttt | tcaaaatgca | acaatgagaa | aagaaagcac | aaagaggaaa | 60 |
| ttcacagaac | caaatgagat | taacatcaat | tcacattttg | tttctaaaga | atataagaga | 120 |
| aaacacccga | ttcactcagg | cagaggaaaa | cctctcaaag | gtgcataatt | ctcatgcagg | 180 |
| caattgttcc | atcacaattc | caatcactga | tatgtcataa | atcaattttt | gcaagtcatt | 240 |
| tcccatcaaa | tcaaagataa | attgcataat | catcatggat | cattagggc | | 289 |
| <210> <211> <212> <213> | 5258 1207 DNA Glycine max | S | | | | |
| <223> <400> | unsure at a 5258 | all n locat: | ions | | | |
| cgtctgacta | cctaatactc | ctaaacacta | tcttctctac | nctctccact | agcncccgag | 60 |
| cgcnntttga | gnactgttgg | aaccacgcgg | aacccgcgga | cactctacag | tcaagcctgc | 120 |
| ccggcatgcc | aaaccatcaa | tgtgtgacat | taacacacat | ttttctctaa | tggcactaac | 180 |
| atcgaagcct | atggctctcg | cgtggtggaa | atacattttg | ctcgtatagc | aacgcccatt | 240 |
| atcgcaaggg | agaagatgac | cccctcgcg | tctcgtctca | tgaaggctag | aatacgatat | 300 |
| tcttaggggc | tgaagtaata | gggtgattgc | ctacagcaaa | accaacacag | gttcgcgtct | 360 |
| tgcaaaagga | gtacacatac | acttcattta | catctttggg | ctcgcacaac | tatatcttgg | 420 |
| agaagtcctg | cggcaaccca | cctccccact | gggaagataa | tcttgttaaa | gagcgtcctc | 480 |
| atagacaaaa | cgcctcagta | tagaatagaa | atttcacctg | tggtacttaa | gagtaacttt | 540 |
| aatggcgacc | cagcacttat | ttacaaaaaa | tgtttacgca | ctcaataatc | gcgggaattt | 600 |
| agaaccgcac | attatttctc | tcccaacaga | aatactatat | agaaatgaaa | ggggtacaaa | 660 |
| tactaaacgt | tgggcgacgc | cgtaatatag | attccttttt | acaaagagac | acgtgaaatt | 720 |
| aatgagtcct | cttgactttt | aaacaaaaa | acaagattct | acaccctcac | aaatctttct | 780 |
| ccagcacaaa | tagaatagaa | cggttgtata | cactcataaa | aaaaacaaaa | tcgccggtgt | 840 |



tgagtagtgt gaggcgaaca tgaaccccca agccgtgaaa aagttcgttg aggagaatca 420

| aaagttggca | gcggagtgtg | | | | | 440 |
|---|--|---|---|---|----------------------------------|--------------------------|
| <210> <211> <212> <213> | 5261 283 DNA Glycine max | < | | | | |
| <400> | 5261 | | | | | |
| ctgtttttgg | tccaataaat | ttaaaattga | tctttttagt | ctatttaatt | tgaaaagtgt | 60 |
| atgttttaat | ccttctgtct | aaaagttttc | tattcaaatg | ttgtcaaaac | gaatccttta | 120 |
| aaagaaaaac | actcttgtca | taggttgttt | gataataaga | atgcaagaac | agagtgactt | 180 |
| accatctaag | ctaatttgtt | agtcagacaa | ccaaatattt | aaggacattt | aaacaaaggt | 240 |
| accaaacaca | aaagcttttt | tcatattaca | agaacaagaa | cta | | 283 |
| <210> <211> <212> <213> | 5262 345 DNA Glycine max | ĸ | | | | |
| <400> | 5262 | | | | | |
| agcttgttcc | atgagcaaaa | accagtgtta | ttatatttga | tatctaggag | ggaatggcac | 60 |
| | | | | | | |
| tagcagatat | tgccatataa | gcacaccaac | atttcacctt | ttttataaca | gacacaatgt | 120 |
| | - - | | | ttttataaca attaaaaaaa | | 120 180 |
| caagcttgta | ctaagagcct | accctttctt | ctagggtgga | | ggaatttcta | |
| caagcttgta | ctaagagcct | accetttett | ctagggtgga | attaaaaaaa | ggaatttcta | 180 |
| caagcttgta tatgtgtgtg catgttccct | ctaagagcct tgcatactta ttcatggttg | accetttett | ctagggtgga tgcataccta tcttgattct | attaaaaaaa caaccatcca gtgtggtcct | ggaatttcta | 180 240 |
| caagcttgta tatgtgtgtg catgttccct | ctaagagcct tgcatactta ttcatggttg | accetttett tttatttgat ctgcataaat actacttatg | ctagggtgga tgcataccta tcttgattct | attaaaaaaa caaccatcca gtgtggtcct | ggaatttcta | 180 240 300 |
| caagcttgta tatgtgtgtg catgttccct aatgcaagat <210> <211> <212> | ctaagagcct tgcatactta ttcatggttg agattcctcc 5263 282 DNA | accetttett tttatttgat ctgcataaat actacttatg | ctagggtgga tgcataccta tcttgattct | attaaaaaaa caaccatcca gtgtggtcct | ggaatttcta | 180 240 300 |
| caagcttgta tatgtgtgtg catgttccct aatgcaagat <210> <211> <212> <213> <400> | ctaagagcct tgcatactta ttcatggttg agattcctcc 5263 282 DNA Glycine max 5263 | accetttett tttatttgat ctgcataaat actacttatg | ctagggtgga tgcataccta tcttgattct tcacctaatc | attaaaaaaa caaccatcca gtgtggtcct | ggaatttcta ttcccttatt ttttttacgg | 180 240 300 |
| caagcttgta tatgtgtgtg catgttccct aatgcaagat <210> <211> <212> <213> <400> tgatcaaaac | ctaagagcct tgcatactta ttcatggttg agattcctcc 5263 282 DNA Glycine max 5263 aattatctaa | accettett tttatttgat ctgcataaat actacttatg | ctagggtgga tgcataccta tcttgattct tcacctaatc | attaaaaaaa caaccatcca gtgtgggtcct ttttt | ggaatttcta ttcccttatt ttttttacgg | 180 240 300 345 |

| taaaatttaa | agaactaaaa | cgtaaaaact | gaaattaaaa | tgactgaaca | taaatcataa | 240 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| aatagctgaa | aataaactaa | aatgttcaaa | atgcacaaat | tt | , | 282 |
| <210> <211> <212> <213> | 5264 407 DNA Glycine max | ς | | | | |
| <400> | 5264 | | | | | |
| agctttctcc | actaagttgc | ctaatgcctg | aaatgtcttt | tctgatggta | gtggtcctag | 60 |
| atgcaagaaa | gaatttctcc | aagaacaccc | tcttaaggtc | atccctgctg | aaaatggact | 120 |
| tgggagcaag | gtagtgtagc | caatcttttg | ccactccctc | caaagaatga | ggaaaagcct | 180 |
| ttagaaagat | atgaccttct | tggacattag | ggggtttcat | ggtggaacaa | acaatatgga | 240 |
| actccttaag | atgcttataa | ggatcttcac | ctgcaagacc | atgaaacttg | ggcagcaaat | 300 |
| gtattagtcc | agtcttgaga | acatatggaa | caccctcatc | aggatattga | atgcacaagc | 360 |
| tctcataagt | gaaatcaggt | gcaaccatct | ccctaagagt | cctctca | | 407 |
| <210> <211> <212> <213> | 5265 284 DNA Glycine ma: | × · | | | | |
| <400> | 5265 | | | | | |
| tcttatccaa | ggcaattctt | ggtggtgaag | ctccttcttc | cttggcttat | tccctagtgg | 60 |
| atggtgcctc | ccctatcctc | ttctcctttg | ccttccgctg | catctccatg | gtgaaaaatc | 120 |
| accattgaag | gacctcattg | aagctcaaag | atccagcctc | catagaagct | ccacaagcaa | 180 |
| gcttccatca | agtggtaatc | agagcacaag | agcttcaagt | aggtgctcct | taaacctcca | 240 |
| ttaattttt | ttctttacct | tctcttccat | tgttgtttct | tcat | | 284 |
| <210> <211> <212> <213> | 5266 375 DNA Glycine ma | × | | | | |
| | Cry Crite, max | | | | | |
| <400> | 5266 | - | | | • | |

| aattttgcta | tgtgaagatc | tgcagagacc | agagcttgaa | gcgaaagccg | ttatgagagc | 120 |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ttgagatgag | tttgtgagtg | gttgtgagat | cctagaggtg | aaggagacat | cctcaccact | 180 |
| tgtatttttg | caatctttca | tcttgttctt | ttctttgttg | taaaggaggc | ttcctagtta | 240 |
| tġgaaagtta | aaatcctctg | ttggatcttc | cttgtaggta | cttgatgtaa | atatctttct | 300 |
| atctatttaa | tgatgttttg | tgtgttcttt | gtgctctcag | tttttcattc | tagtatgcct | 360 |
| ttaccttgat | cacat | | | | | 375 |
| | 5267 281 DNA Glycine max | c | | | · | |
| <400> | 5267 | | | | | |
| ttgtgaggta | actatggtgt | cagtcaggag | atgcagtcag | catgtaatag | tgctgaaact | 60 |
| actatgcatt | tggaataagg | aagcatttaa | agtagagaag | aagctgaggg | gaagtggtgt | 120 |
| catttacctg | gaagggacaa | gggcaacaaa | tggtgcaaaa | gtgataatta | aaacatttac | 180 |
| tcgccttgtg | atacagttct | gaaaagaaat | ctgtgggaac | aaatcagaca | actgaaaact | 240 |
| gcaaataggg | ggtgggggtg | gctatggcta | tggtgtgtat | t | | 281 |
| <210> <211> <212> <213> <400> | 5268 442 DNA Glycine max | ĸ | • | · | | |
| agcttttaga | aaaaaggtta | tagtttagag | aataggatat | agcaaaacct | ctgcaaccca | 60 |
| atgtcttgtc | ctttacgtag | tgaattaggc | ttttgaacçg | tcatccccct | aacctaggtc | 120 |
| caacgagggt | taaaaaacat | taaaattcca | tggaaccgta | tttttccgtc | taaaccaaga | 180 |
| aaagcttaaa | acagattagc | agttcttaaa | ctcatttgta | gaatttaaga | caattaagaa | 240 |
| aatattgtag | acaactttta | tcgtgcttcg | tgcattaaaa | aaaaaacgag | ttactgtata | 300 |
| ttttcttgat | tttctcgact | tcccctttt | attttattaa | gttgattcca | cactttatag | 360 |
| tactttcaat | tttattttat | ccatctgtaa | ttaatatcta | tacatctgca | gaattatgtt | 420 |
| ttcattttgc | ttttatcttt | at | | | | 442 |

| <210> <211> <212> <213> | 5269 303 DNA Glycine max | ς. | | | | |
|-------------------------|--|--------------------------|------------|--------------------------|------------|------------|
| <400> | 5269 | | | | | |
| ttagtgaact | atagacactc | aagcttgtaa | tatccttgat | tgtcagcaat | agaccttaca | 60 |
| tgaccatcaa | ctatgatttt | gaccccctcc | actcccatgc | catttccatc | aactacacgg | 120 |
| cctccaacag | aaaatccagt | tacctgtaag | aattgacaat | gatagcagat | aattgagaaa | 180 |
| aataacatac | acataaccac | aataatagac | aggtatcagt | aatattacaa | tatcttagaa | 240 |
| tgtgggtttg | ggcctaactc | aaccccaaaa | gctagcttgt | aaggtgaggg | ttgcctccca | 300 |
| ctt | | | | | | 303 |
| <210> <211> <212> <213> | 5270 439 DNA Glycine max | ¢. | | | | |
| <223> <400> | unsure at a 5270 | all n locati | ions | | | |
| agcttctggt | gggacatctt | gacttgcttt | ccaatctgac | attcaccaca | gattctgcct | 60 |
| tcttctattt | tcagattggg | aatgcctcta | acagcacctt | ggtcaatgat | tttcttcatg | 120 |
| cctcttaagt | gcagatgtcc | aaatctttga | tgccatattt | tgacttcatc | ttctttggag | 180 |
| gatagacatg | tagaggagta | agtggtttgt | | | | |
| | cggaggagca | actygettet | tgaggtgtcc | ataggtaaca | gttgtccttt | 240 |
| gatctgctgc | | | | ataggtaaca ttaccaagca | | 300 |
| | ccttcattag | aacttcactc | ttctcatttg | | ttctgacttt | - |
| gtgaagttta | ccttcattag | aacttcactc ttcatcacaa | ttctcatttg | ttaccaagca | ttctgacttt | 300 |
| gtgaagttta | ccttcattag cattgaatcc accagcaata | aacttcactc ttcatcacaa | ttctcatttg | ttaccaagca | ttctgacttt | 300 360 |

| tgaactgcca | catcactctc | tgattcatac | cgtgttttat | tgtttacttc | tagacccttt | 60 |
|------------|-------------|------------|------------|------------|------------|------------|
| attaagccac | cggacaccgc | gcaaatagat | gaactggcac | caagggcaga | tgataatcaa | 120 |
| ccatctccca | tacccttggc | tattatgtgc | cacaaaagac | tgtacaccga | ccatgggcca | 180 |
| cagcaactgg | ggataaagca | atggcacgga | ctacatcttg | acaaaacgtc | acgggaagag | 240 |
| tgaaca | | | | | | 246 |
| | | | | | | |
| <210> | 5272 | | | • | | |
| <211> | 995 | | | | | |
| <212> | | | | | | |
| <213> | Glycine max | , | | | | |
| <213> | Grycine maz | ` | | | | |
| <400> | 5272 | | | | | |
| | | | | | | <i>c</i> 0 |
| aggacacgta | taaacggacg | ataataacag | ccagggcctt | gaacctgtga | accettecat | 60 |
| | | | | | | 120 |
| acccgaacca | tggaagcaaa | cccccgcatg | ctagaatcaa | agaaaaacag | tttttaccat | 120 |
| | | | | | | 100 |
| acaaaatggg | aagcaccctc | accgcgagcg | acccaaagaa | aatggccctc | acacgagcga | 180 |
| | • | | | | | 0.40 |
| acaacaggcg | aaggacgcgg | ctgcccccta | acccaaggtg | caaacaagga | ggaaaaaaat | 240 |
| | | | | | | 200 |
| agcaacaaac | tctataggaa | agcgtatctt | cgccgcccaa | accaagaaac | aagettaega | 300 |
| | | | | | | 2.00 |
| acccattaac | cagaccatca | aacccgatat | ggcctaaccg | gagaaaactc | caaaaaaaaa | 360 |
| | | | | | | 420 |
| ttgcatgaca | agctttgata | cgggactctc | gccgcaataa | aagaagaaag | cgaagtgact | 420 |
| | | | | | | 400 |
| ggcgtaaaga | aaccggaggt | tacccgaccc | ccccacccga | ccattcgaat | aaaaggaagg | 480 |
| | | | | | | E 4.0 |
| agccccactt | gtagcagtac | gaaaggaatc | gtaggtacac | accaacaagg | aacgaaacaa | 540 |
| | | | | | | |
| cccaacctta | cgcccaacat | caggaacacc | atacccagcg | cggaccatta | agaccacacc | 600 |
| | | | | | | |
| cccagtggcg | gagagcataa | agaaaaacat | actgctggga | gaaaccacaa | gaaacggtta | 660 |
| | | | | | | |
| aacaccaaac | gcaagagaat | aaaaccccgc | tgcgagtgta | aaaacgcgcg | acctcttaac | 720 |
| | | | | | | |
| gaagaaaaac | cgcgctaact | cttatctccc | ccaaagacaa | acgcaccggg | gcgctgaacc | 780 |
| 5 5 | | | - | | - | |
| aaaaccctcc | aaacaaaaat | gagcgaaatc | acaaagggca | caagcacaac | acgccgcgac | 840 |
| addacticge | uuuuuuuu | gagogaaace | | | | |
| ccaagegeag | aaacacaato | cacadaaaca | gataccctta | agaccactat | acaacqatqq | 900 |
| ccaagcycay | addicacacy | cycayaaacy | gacacccca | agaccaccac | ~~~~~ | 200 |

<210> 5273

catacataac acaagcgcga agaagcgtct caccc

acggcgacga ctaatagcac aagtcaacac gagggaaaag aaaggcttcc acacctaaca 960

995

| <211> <212> <213> | 436 DNA Glycine max | \$ | | | | |
|---------------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a 5273 | ıll n locati | ons | | | |
| agcttgaagt | gagaaagtgt _. | nggaagagtc | agtcttccta | cttttattcg | ttgaccacag | 60 |
| agtggtacct | ggagatatgt | cgcgggagtt | aagagacctt | ggggacgtca | agtggggtgc | 120 |
| tattgcccaa | aaccaagctt | gacaaatccc | gacccaaccc | gggcatagtc | agtcagtgag | 180 |
| aacctgtgat | gtacctaaac | aggcgagctc | ctggtagtca | accgataaaa | gaacaaagac | 240 |
| cacaaagcaa | ggaggcttgt | gtggtggctg | gccagctatt | gattctgagt | gatatctgga | 300 |
| atatggcctc | tggtaatcga | ttaccaaggg | tgtgtaatcg | attacaaggc | ttaaaaatga | 360 |
| agacaagaaa | ttaagatggt | ctctggtaat | taatttccaa | gagtgtgtaa | tctattacca | 420 |
| ggccttaaaa | tggggt | | | | | 436 |
| <210> <211> <212> <213> | 5274 288 DNA Glycine max | ĸ. | | | | |
| <400> | 5274 | | | | | |
| tcggaagaaa | gtgatgaggt | acaagcccta | aaggcagagc | ttgaaagagc | ctgggtagtc | 60 |
| gaaaaaaagt | tcaagtccat | agccatcaaa | gtctgaaaaa | agtatgatga | actaagggat | 120 |
| gtcaatatgg | ccaccgatga | aaccttggaa | tgaaaaacca | aaaaggcccg | aaaggaagaa | 180 |
| cacgaccaaa | gcaaagtttt | gaggggcttt | atatggcagc | aatagtgagc | ttaagctccg | 240 |
| aagaggtgaa | aggaatcatc | acgggtcaaa | tgcatgatct | tgaaggac | | 288 |
| <210> <211> | | | | | | |
| <212> <213> | 5275 362 DNA Glycine max | × | | | | |
| <212> | 362 DNA | × | | | | |
| <212> <213> <400> | 362 DNA Glycine max | | gattaatact | tgtaacttgt | tgaagttagt | 60 |
| <212> <213> <400> agcttgactt | 362 DNA Glycine max 5275 | aagtagcatt | | | | 60 |

| aatttgatct | ttgattttta | aaaactatgt | ttgtttttca | acaatatgaa | actatcttct | 240 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gatttctcct | gtaaaaacct | attgtttgtt | tttttttaa | gtctcattag | acaataactt | 300 |
| cgttgtttta | aaaaaaggtt | ttaaatttag | taaaaatcac | aacttactcc | cccccccc | 360 |
| сс | | | | | | 362 |
| | 5276 120 DNA Glycine max | ĸ | | | | |
| <400> | 5276 | | | | | |
| tttcttaaca | actttatagg | actacccatt | tttaacttga | tacgaagatt | tggtagacca | 60 |
| gatgtgttta | gtgaattgag | aaattcagtt | gtgattgatt | ggaaatgcca | actgtcaatg | 120 |
| <210> <211> <212> <213> | 5277 459 DNA Glycine max | × | | | | |
| <400> | 5277 | | | | | |
| agcttgaagg | tgtgtaaccc | accattttcc | atagtaaaat | actggtaatg | tgtctactat | 60 |
| cattgtcatc | attttttcg | tcattgaggt | gccacttgag | ctgccaggtt | ctccaccttt | 120 |
| gggtgtattc | tttgaaagat | ccgtgccccc | tttttgcaca | tgttttgtag | ttgcatccta | 180 |
| tcagaagcca | ttataccgac | actgcctaac | gaaggcaacc | attaggtcct | ccctggaatg | 240 |
| gactcgggaa | ggttccaagt | tagtgtacca | gggaacaact | accccaataa | gactttcttg | 300 |
| gaaagaatgt | atcaacaatt | cctcatcttt | tgcgtatgcc | cccatcttcc | gacaatacat | 360 |
| ctttagatgg | ttcttggggc | aagtagtccc | cttgtacttg | tcaaagtcca | gcaccttgaa | 420 |
| cttgggaggg | gtgatgatat | tggggactaa | gaacaactc | | | 459 |
| <210> <211> <212> <213> | 5278 289 DNA Glycine ma | × | | | | |
| <400> | 5278 | | | | | |
| ttgatggtgt | caagaagaaa | tcacatgttt | gtcatcatca | aaaaggggga | gaatgtgaat | 60 |

| gtatgtatac | atgattttga | tgatgtcaaa | gaagaatcta | acaaggctgc | ttcaaatgat | 120 |
|----------------|-------------|------------|------------|------------|------------|-----|
| aagcatttgc | | | | | | 180 |
| | | ccttaaaaca | | | | 240 |
| | | aatcgattac | | | | 289 |
| aattyattat | caygaagcgc | uuccguccuc | cagaagacag | 390034344 | | |
| | 5279 | | | | | |
| | 402 DNA | | | | | |
| <213> | Glycine max | κ . | | | | |
| <400> | 5279 | | | | | |
| agctttcaat | atattgagac | gctcgaaatt | aaacatcgga | agctgtcgag | aaattcaaat | 60 |
| ggtcataact | tttttcacgg | atgtccgatt | caagcgtatc | acatatacag | acactcgaaa | 120 |
| ttgaacaacg | gaacctctcg | agaaattcaa | atggttataa | cttttcacac | agatgtctaa | 180 |
| ttaaggtgca | tcacatatag | agacactcga | aaatgaacaa | cggaagcttt | cgagaaattc | 240 |
| aaatggtcat | aacttttcac | actgaggtcc | gattcacgct | tataacatat | cggggcgcct | 300 |
| aaaattgaac | aacagaagct | cttgtgaaat | tcaaatggtc | ataactttta | actcggatgt | 360 |
| ccgattcagg | cgccttacat | atagagacgc | tcaaaaatga | ac | | 402 |
| | · | | | | | |
| <210> <211> | 5280 304 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <400> | 5280 | | | | | |
| attacgagtg | cctgtatatt | gatgcgcctg | agtcagacat | tcgagtgaaa | agttatgacc | 60 |
| atttgaattt | ctcgagagct | tcctatggtt | aattttgagc | gtgtcgatat | attatacgcc | 120 |
| tgaatcgaac | ctcatggtga | aaagttatga | ccatttgaat | ttcttgagag | catccgttgc | 180 |
| tcattatcga | gcgtctctat | atgtgatgca | cctgaatcgg | acctccgagt | gaaaagttat | 240 |
| gaccatttga | atttctcgag | agcttccgtt | gttcaatttc | gagcgtctcg | acatattatg | 300 |
| cgcc | | | | | | 304 |
| | | | | | | |
| <210> <211> | 5281 418 | | | | | |

| <212> <213> | DNA Glycine max | ς. | · | | | |
|-------------------------|-----------------------------------|------------|------------|------------|-------------|-----|
| <400> | 5281 | | | | | |
| agcttaaaca | ttcaacttcg | agcgtcttga | tatattacga | gtctcaatca | aacatccgag | 60 |
| aaaaaagtta | ttgtcgtttg | aatttgctca | caagttcaac | attcaatttt | gagcgtctcg | 120 |
| atatatgacg | ggactcaatc | agacatccga | gtaaaaagtt | attgtcgttt | gaattaactc | 180 |
| agagcttcaa | cattcaattt | cgagcgtctc | gatatgtgac | gggactgaat | caaacatccc. | 240 |
| agtacaaagt | tattgtccgt | tgaatttgct | caaaggtttc | acattcaatt | tcgaacgtct | 300 |
| cgttttatta | cgggactcaa | tcagaccatc | cgagtataaa | gatattgccg | tttgaatttg | 360 |
| ctcagaacct | caacattcaa | ttttgagcgt | ctcgatatat | gacggggact | caatccta | 418 |
| <210> <211> <212> <213> | 5282 276 DNA Glycine ma: | x | | | | |
| <400> | 5282 | | | | | |
| tagagccaat | tcaaacgaca | ataactttt | actcggatgt | ctgattgagt | cccgtcatat | 60 |
| atcgagacgc | tcgaaattga | atgttgaagc | tcttagccaa | ttcaaacgac | aataactttt | 120 |
| tactcgaatg | tctgattgag | tcctgtaata | taacgagacg | ctcgaaattg | aatgttgaag | 180 |
| ctctgagcca | attcaaacga | caataacttt | ttactcggat | gtctgattga | gtcccgtcat | 240 |
| atatcgagac | gctcgaaatt | gaatggggaa | tctctg | | | 276 |
| <210> <211> <212> <213> | 5283 268 DNA Glycine ma | x | | | | |
| <400> | 5283 | | | | | 60 |
| | | tgaagggtga | | | | 120 |
| | | cgggggtcaa | | | | 120 |
| | | ccaatcccga | | | | 180 |
| cctgtgatgt | acctaaccag | gcgagctcct | ggccgtctac | agataaaagg | aaatcaagac | 240 |
| cacaaagcta | ggaggctcgt | ggtggctg | | | | 268 |

| <210> <211> <212> <213> | 5284 280 DNA Glycine max | |
|-------------------------|--|-----|
| <400> | 5284 | |
| tgttgaaatt | gccatgtttg gatgagttaa acatacccat tctgttttag ggtttttatg | 60 |
| aggatgcttg | tgatgttcat gtactgaaat tgcttatgga aaactgttag agatgaaagg | 120 |
| tagagttaac | ctagggttag aaagtgagaa tgtggtgtta tgagtggaaa aaaagtgagg | 180 |
| ctttgagagt | tgaaaggcta aatctggatt ctgtagtaaa tggaggttaa aatgagttaa | 240 |
| tcctagcttg | aaatgccatt taggacttat gagaaaggtt | 280 |
| <210> <211> <212> <213> | 5285 563 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5285 | • |
| agcttctaaa | a agaacaagtg cagctcctac taacttgcat gcgcacgtga atgattatgc | 60 |
| aactaatact | taatcettea aatgaetagg agtgtggett tgeetettgg geettgetgt | 120 |
| ttgcaactcc | c ttgctgttac tcacattggg ctttgctgct tgtaactctt tgttgttact | 180 |
| catcagttgg | g ttaattgttt tegttetgat caagagagte atgeacatat tttgtttaca | 240 |
| caaaatgcac | ttgagataga gtcatcacaa gtttgatatt agagcaatcg aaactcgagt | 300 |
| tcaattcaaa | a ttacccttgt gttgtaagat ccgcaaaacc cacacttgtg gtatagccaa | 360 |
| tgaaatggtg | g cagtaccett etcatggeag teattgeana atatateetg tgatataaaa | 420 |
| aatcaggttt | t cacaattaaa gtttaaatct tcaaattgtc ccaagaaaaa tgaatctttt | 480 |
| catttggttc | c teeteatett tetgaattga ataaateeaa eattetgaaa tgaaaatgea | 540 |
| ctaaaacttt | t ttttttttt aaa | 563 |
| <210> <211> <212> <213> | 5286 284 DNA Glycine max | |

| <400> | 5286 | | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tcttgagcga | tcacgtgtcc | cttctgaagt | atgcctcgca | tcctaattta | agccagataa | 60 |
| cttcctagct | tttatttatt | ttaatgatgt | tttgttgggt | gtagtatgcc | acaaatttga | 120 |
| ctggaggttc | atttgatgaa | gctcgaatgc | ttcaaaatgt | agaagcatgt | gaatggttga | 180 |
| ccagtgcctt | gcatggtctt | ggttttgcct | aatctagatc | ctagttatgc | aaacatgaga | 240 |
| gctttatgtt | cctttcttta | cttttctctt | aaaaatcatc | tggt | | 284 |
| <210> <211> <212> <213> | 5287 464 DNA Glycine max | × | | | | |
| | | ggagagactg | tctgacttca | tgtccgactt | cggtctcggc | 60 |
| | | | | agatgttgcg | | 120 |
| | | | | cgaccgttgc | | 180 |
| | | | | gtgaaagatg | | 240 |
| | | | | gcgtttctcc | | 300 |
| | | | | accatgaact | | 360 |
| | | | | gtagtcttaa | | 420 |
| | | | | | cgaggaccc | 464 |
| tgctctgtcc | aateteetet | ttttctccac | tgagttattt | caac | | 101 |
| <210> <211> <212> <213> | 5288 284 DNA Glycine ma | × | | | | |
| <400> | 5288 | | | | | |
| tgaacttgtt | attgtcaaat | tcaaaacaaa | tatcatttat | agaagttgta | gacataatct | 60 |
| tcttgagaat | atactaatta | tcagtctatg | catgactaag | atgctatctc | aatacagcct | 120 |
| atttcaacat | gtgattataa | tttgctaatg | cagctggcat | ttctgatgaa | cattgctgca | 180 |
| taatctgatg | tgtatttatt | ttatgctttg | cagttcaaag | tgtttttgag | actaaagtac | 240 |
| aaattttctt | gttcttttgt | gccggtgctg | ctgaagcatc | tttt | | 284 |
| | | | | | | |

| <210> <211> <212> <213> | 5289 378 DNA Glycine max | : | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5289 | | | | | |
| agcttctggt | gggacatctt | gacttgcttt | ccaatctgac | attcaccaca | gattctgcct | 60 |
| tcttctattt | tcagattggg | aatgcctcta | atagcacctt | tgtcaatgat | attcttcatg | 120 |
| cctcttaagt | gcagatatcc | aaatctttga | tgccatattc | tgacttcatc | ttctttggag | 180 |
| gatagacatg | tggaggagta | actggtttct | tgaggtgtcc | ataggtagca | gttgtccttt | 240 |
| gatctgctgc | ccttcattag | aacttcacac | ttctcatttg | tcactaagca | ttctgacttt | 300 |
| gtgaaagtta | cattgaatcc | ttcatcacac | agctgactga | tgctgatcaa | gtttgcagtc | 360 |
| agtcccttca | ccagcagt | | | | | 378 |
| <210> <211> <212> <213> | 5290 283 DNA Glycine max | ĸ | | | | |
| <400> | 5290 | | | | | |
| tttcgattca | ttctatgtac | ccgtggtggt | ccacattgtg | tttcgcgtat | ttttattctc | 60 |
| gtttcattta | ctttttatac | ccccttttga | cgtgcttaag | ccatcttatt | taagtcattt | 120 |
| ctcgcttaaa | ctaaaaataa | aataaatttc | caccgatcgt | ttgaattgta | ttatccgtta | 180 |
| acttcggtta | aaatgaattc | cgaccgttcg | gttgtgccgt | aaccacgttg | gaaattaaaa | 240 |
| aaaaaaaaga | ggtaaaaaat | aatataataa | taaaaaaaca | tct | | 283 |
| <210> <211> <212> <213> <400> | 5291 442 DNA Glycine ma: | × | | | | |
| | | taatgaccca | ctaacctaga | attaaaataa | cttaatgcca | 60 |
| | • | | | | aattgtggca | 120 |
| | | | | | | 180 |
| accaaaagto | acccccaaca | gccaacaagt | Cayecaccat | Liggicial | aaaaggctga | 100 |

| tgcctaggtt | gccaattggg | cccttattac | aacttgaact | aaacctaact | aaagcccttt | 240 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tagttgattc | acccaaaaca | tatttttggt | cagccaactt | tacaaggatt | gggccattat | 300 |
| ttagacaaac | taaacactct | aaaattgaga | caaagtggtg | tcatttagtc | ctcctccatt | 360 |
| taggccatga | tacaactcac | aacctttgac | ttttctcctt | gaaacttggg | cttgtattca | 420 |
| aatagtattg | acaacacttg | tt | | | | 442 |
| <210> <211> <212> <213> | 5292 276 DNA Glycine max | κ | | | | |
| | | ataacttatt | agtcggatgt | ctgattgaga | cccqtcatat | 60 |
| | | | | ttcaaacgac | | 120 |
| | | | ` | ctcggaattg | | 180 |
| | | | | gtccgattga | | 240 |
| | actcgaaatt | | | | | 276 |
| | | 3 3 3 | | | | |
| <210> <211> <212> <213> | 5293 478 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttaacaa | aaggcatgcg | aagtgggtgg | aattcctaga | gcaattccct | tatgttatca | 60 |
| aacataaaaa | gggaaaaggt | aatattgtag | ccgatgctct | ttctcggcgt | catgcattac | 120 |
| tttctatgct | tgaaacaaaa | ttgattggtc | ttgaatgttt | gaaaagcatg | tatgaaaatg | 180 |
| atgaaacttt | tggagaaatt | tttaaaaatt | gtgaaaattt | ttcagaaaat | ggtttcttta | 240 |
| gacatgaagg | ctttctttc | aaagaaaaca | aattgtgtgt | gcctaaatgt | tctactaaaa | 300 |
| aattgcttgt | ttgtgaagca | catġaaggag | gtttaatggg | gcattttggg | gtccaaaaga | 360 |
| ctctagaaac | attacaagaa | catttttatt | ggcctcatat | gaaaaaagat | gtgcagaaat | 420 |
| nttgtgaaca | ttgcattgta | tgtaaaaaag | caaagtctaa | tgtaaagcct | catggatt | 478 |

| <210> <211> <212> <213> | 5294 278 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|------------|------------|-------------|------------|-----|
| <223> <400> | unsure at al 5294 | l n locati | ons | | · | |
| tctatataag | ctgaaccatt t | tatcaataa | acacaagttg | agttttattc | agaaaattag | 60 |
| agtttatctc | ttttatctta g | tgagagtga | ttctcctaaa | ttcttgagtg | attcaagaac | 120 |
| accctggctg | tatcaaagga c | tttcacaac | ctttgtgtgt | tgccctcgct | gganagagtg | 180 |
| attctttcct | tcctatcatc to | ccacccttg | ttctttcaaa | ccacaattcc | agaaaatcca | 240 |
| cctctgccca | aaattatctc g | tgaccataa | ctcccatt | | | 278 |
| <210> <211> <212> <213> | 5295 927 DNA Glycine max | | | | | |
| <223> <400> | unsure at al 5295 | l n locati | lons | | | • |
| ctatccaacc | tataacgtat a | tctcctaga | atgactccat | ctcgcgcacc | cacggcnnaa | 60 |
| ttgaaaccgt | cgtttatgcg g | cgatcctna | aaagacgacc | agccagcaag | caagcccccc | 120 |
| aaaaaaacct | cgaagaagca t | cttgaggaa | accccttaac | gaagccatat | aaagaggcca | 180 |
| cgcgaattct | gtttttggta a | aaaagctac | ccaacgtttt | ggcacacgtn | gagaccaact | 240 |
| cgaattccgg | cgctggggct c | cacaaaaca | ccactagtaa | gaactgaccg | tggggaccca | 300 |
| atgagaagac | agcctggggt g | ggaaccaag | ccctctttcc | cgggaacaca | gcccacacga | 360 |
| gcacgcccag | ccttgaacca c | ccaaaacct | ttgagaagtg | cccacaactt | tcctgtttgg | 420 |
| gccccaaacc | ataggcaaca g | acacagctc | aatccccacg | acccatagcc | cacaagcacc | 480 |
| cccacaaaca | ggcttgatct a | cctcaaaac | cctacacacc | taggacacag | acaagggcgg | 540 |
| gccccaataa | aataacacga a | actgcccta | acaaagaagt | .gaacctaggt | cggtttccac | 600 |
| ccagccatga | caagcccaat g | gccatcaaa | agcatcccca | acccacaaac | gtaaccaagg | 660 |
| aaaaaaaaa | aaaccactat t | ggaaaatga | aacgacgaac | ttttcggaat | taaaacaatc | 720 |
| ggaacaaacc | aagggctttc c | cgcgaagca | aaacaagccc | acgactcgac | cggaaggaat | 780 |
| tgaacatatt | cgcgcctatc a | ccaacggaa | gccaaaggta | attactcgcc | gaattcaaaa | 840 |

| cgccggtatt | ggacagatag | caaagtaagc | caatgcgagg | taaaccaacg | cacacggcag | 900 |
|-------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| cgactgaacg | cggacactca | cccaccc | | | | 927 |
| <210> <211> <212> <213> | 5296 488 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 5296 | all n locati | ions | | | |
| agatctgtat | atactcgatt | gtatcataaa | nttctcctct | taatctataa | ttgtatatga | 60 |
| tgtcatggta | ttgaaaatac | tgttatttac | atccggaggg | ganatttgaa | tccattctat | 120 |
| tgaggagcct | ctatagaata | ctcnagcttg | tgcttgtttt | atttaatatg | ccttacgatc | 180 |
| atgtagaaac | ttatgtgtgt | tcctactatg | aacttgagaa | tacaaaagtt | gatgcaaata | 240 |
| acaaagctga | gatttaaaag | ggaactaagt | atgccttacc | taatatcgcc | ttttttaact | 300 |
| ggctttgagt | tggaacacgt | cgatgacttt | gtctgttcac | ctgaacctat | taactaatgc | 360 |
| ttcacaattt | gtgcttatga | gaccttggac | cgatcttatt | ggttcaatcc | atggtgttca | 420 |
| ttatgctaac | gtctcttaac | actttttgtg | tgatgatact | gatagtgata | cttcttataa | 480 |
| tgttgtgg | | | | | | 488 |
| <210><211><212><213> | 5297 834 DNA Glycine max | ĸ | | | | |
| <400> | 5297 | | | | | |
| cgcaaatgaa | tcgacccacc | cggaccccaa | gtcaccgaca | gccgcagctt | cgagccatca | 60 |
| aagggcacac | ggaacccccg | agccccagaa | agcgcataag | gacacggggc | cctctggaag | 120 |
| aacaaaggcc | ccaacccacc | ccaggccaag | cggggaacaa | gtaaaaacga | aaggcccagg. | 180 |
| gaggcacaaa | tcaatccgaa | aggcaccaca | tggccccaca | gaacccggag | agaaattcaa | 240 |
| aagggcataa | cgcataacac | agaaggcagg | gcccggcgca | caaacagtct | gcacgaccgg | 300 |
| gaaagaacaa | cggaagctgc | acagacagtc | caaaggaaac | aacgcgacac | agggggaaaa | 360 |
| gggcaagacc | acaggatagc | aagacgctca | gaaagcaaca | aacgcagtct | ccaaaacccc | 420 |

| caaagggcag | aacgggccca | cggagggcca | accaaggccc | ccccaaacc | agaggcccgg | 480 |
|-------------------|-------------|-------------|------------|------------|------------|-----|
| aaggaacaac | caagacagcc | ccaaaaacaa | aagccatggc | cgggaccccg | agggcacaac | 540 |
| caaacccccc | aagaaccgga | ccccccgaa | gggcccaacg | gaaccccggg | acaatcaaaa | 600 |
| ggccaaacac | tccacccgaa | ggcggcaccg | ggcccaaaaa | gaacgaaccc | accaaaagaa | 660 |
| cacaaggaaa | cccgagccgc | gaaagcgcgc | aacgcacccc | gcggagccca | aaagagccca | 720 |
| cacccgcaag | cggcgccgaa | aacgaccgac | agccccgcga | acacaacgcg | ccacaggaac | 780 |
| ccacggggac | gacaagcgca | ccccaacacg | cacgaacgca | cagcgaacgc | accg | 834 |
| | | | | | | |
| <210> | 5298 | | | | | |
| <211> | 240 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| (213) | 01,0110 | | | | | |
| <400> | 5298 | | | | | |
| | | | | | | |
| tctatgagga | ggtcaacttg | gagaacgatg | ctatctgaag | aggcttttca | cgacgaagta | 60 |
| | | | | | | |
| tcttgtagaa | aacatctttc | aagtcctgtg | ataaggggtg | aacgctatga | gaaccttatc | 120 |
| | | | | | | |
| atggttgctg | atgaaaatga | tcactctgtc | tctttatcgt | attacttttt | tccacaggtg | 180 |
| | | | | | | |
| gctcattgtt | atttttcata | taccggagtg | gagcctcact | attttcttt | ccttgggctt | 240 |
| | | | | | | |
| | | | | | | |
| <210> | 5299 | | | | | |
| <211> | 912 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | X | | | | |
| 000 | | -11 - 1 | : | | | |
| <223> | | all n locat | lons | | | |
| <400> | 5299 | | | | | |
| aataataaa | tagataatga | tctacaaata | cadcacadda | cattgatgat | tcttcaggcc | 60 |
| getgatagag | tayataatta | liciacaaata | cagcacagga | caccyacyac | ccccaggec | 00 |
| cnnccttaat | aaaatcccc | ccccgaaata | taaattggac | даааааааса | gggtttaaaa | 120 |
| Ciniccicgge | addatecgee | ccccgaaaca | cadaccggac | guauauaua | 999000000 | |
| tageceaaag | caatacccac | ggggagaggt | tgtttattaa | caaaacccca | caacccaccc | 180 |
| oug o o o o o o o | -39 | 333343433 | 3 | | | |
| aagtcgaagg | ataataaggt | aaaaccgggg | tggccgcata | gatgcgcctt | gcatcaacta | 240 |
| 3 3 33 | | | | | | |
| attgggcttg | ggccgaccgg | ccggataata | aaggaggaaa | accggaaggg | ccccagcaac | 300 |
| | | | | | | |
| aaaagaaatc | ggcaaagcac | atggcacacg | ggataagcca | aacatataat | gtcaaataaa | 360 |
| | | | | | | |
| agaagacgag | catcaaaaac | aacacccaca | tagaacaggc | ccacgattag | gcagaaaaat | 420 |
| | | , | | | | 400 |
| agaggaacgt | tcatcagacg | cgctattgac | gacaataagg | actgccgaaa | aaatagtgag | 480 |
| | | | | | | |

| gaacattcat | tgatagtttt | ccacaaggaa | gcccaggaaa | gaaggtggga | cagaacggta | 540 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ttaacaaagg | acagtgtcaa | ggtgacgaca | aaagaacgga | cgcagcaaat | caaagaaagg | 600 |
| aaacaacgac | ggctgagcaa | tgcaggacac | catcgaaagc | acggaacaaa | aaaaaagaga | 660 |
| cgcaaccaag | aaaaagaaag | gaagcacacg | aatcaaaact | aaggataatt | agaataagga | 720 |
| aagaaactca | cgccacgccc | acaaatgtaa | cgcagagtca | caagacttgg | aaaaacctat | 780 |
| agaatggaaa | gagactggat | agtagagaga | gcgcccgcgt | acgcacacca | aaggtaagaa | 840 |
| gaatgagtaa | actgagcgta | tcgtaaacgc | acagtgaaga | aaaagaatga | agctagagca | 900 |
| acgcaaacag | cg | | | | | 912 |
| <210> <211> <212> <213> | 5300 235 DNA Glycine max | ĸ | | | | |
| <400> | 5300 | | | | | |
| gccctatagt | gagtcgtatt | acaattcact | ggccgtcgtt | ttacaacgtc | gtgactggga | 60 |
| aaaccctggc | gttacccaac | ttaatcgcct | tgcagcacat | cccctttcg | ccagctggcg | 120 |
| taatagcgaa | gaagcccgca | ccgatcgccc | tttccaacag | ttgcccagcc | tgaatggcga | 180 |
| atggcgcctg | atgcggtatt | tttgcttaca | catctgtgcg | gttttaaccc | ccgtc | 235 |
| <210> <211> <212> <213> | 5301 292 DNA Glycine ma: | x | | | | |
| <400> | 5301 | | | | | |
| ctataccgcc | tcatttctct | cccctttgg | taacatcaaa | aagccaaagt | tcgtggcaat | 60 |
| caacacaaga | tgatataact | aaagttcaca | taatcaatta | gaagtcaaaa | ccaaatataa | 120 |
| tccaatcatc | cataagtcaa | aaaccaaata | taattgatcg | aagccgtacc | cgaatcaaat | 180 |
| aaacatgaaa | atgccgtaac | taggaagtga | tcctaggtcg | tttcccaacg | agcagtgaca | 240 |
| agccaaatgt | tcataatata | cttgcagtaa | cagtaacgat | gagagagag | gg | 292 |
| <210> <211> | 5302 290 | | | | | |

| ·<212> <213> | DNA Glycine max | | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5302 | | | | | |
| tctcggctcc | tgctgggaac | gcctctagct | caacacccgt | gcagcctaag | gcacccaccc | 60 |
| agagggaagc | tccccaagtt | ccaactccga | acgcgactcg | accggccggt | aattccaaca | 120 |
| cgacaaggaa | cttccctcag | agaccgttgc | cggaattcac | cccgctccca | atgacgtacg | 180 |
| aagatcttct | accatccctc | atcgccaatc | atttggccgt | ggtaactccc | ggaagggtct | 240 |
| tcgaaccccc | tttcccgaag | tggtatgacc | ctaatgcaac | ttgcaaatac | | 290 |
| <210> <211> <212> <213> | 5303 290 DNA Glycine max | s. | | | | |
| | aattccaagc | tttataagca | aaaagtaaaa | atctatcatg | acaaaaagct | 60 |
| | aatttttagt | | | | | 120 |
| | aagcataaat | | | | | 180 |
| | atgatattgg | | | | | 240 |
| | atcactgttg | | | | | 290 |
| <210><211><212><213> | 5304 289 DNA Glycine max | · · | | | | |
| <400> | 5304 | | | | | |
| tctcggctca | tactgggaac | gcctctagtt | caacacccgt | gcagcctaag | gcacccaccc | 60 |
| agagggaagc | tccccaagtt | ccaactccga | acacgactcg | accggccagt | aattccaaca | 120 |
| cgacaaggaa | cttccctccg | aggccatttc | cggagttcac | cccactccca | atgacgtacg | 180 |
| aagatctttt | gccatccctc | atcgccaatc | atttggccgt | ggtaactccc | ggaagggtcc | 240 |
| tcgaaccccc | tttcccgaag | tggtatgacc | ctaacgcgac | ctgcaagta | | 289 |
| <210> <211> | 5305 450 | | | | | |

| <212> <213> | DNA Glycine max | κ | | | · | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5305 | | | | | |
| agctttacat | cagattttag | taatgaccca | ctaacctaga | attaaaataa | cttaatgcca | 60 |
| ttaacctatt | gaattaaaag | aacttaatgg | ttgagtgtaa | ctgaaattgt | ggcaaccaaa | 120 |
| agtctgatgc | ctgggttgcc | aattgggccc | ttattacaac | ttgaactaaa | cctaactaaa | 180 |
| gcctttttag | ttgattaacc | caaaacatat | ttttggtcag | ccaactttac | aaggattagg | 240 |
| ccattattta | gacaaactga | acactctaaa | attgagacaa | agtggtgcca | tttagtcctc | 300 |
| ctccatttgg | gccatgatac | aactcacaac | cttggacttt | tctccttgaa | acttgggctt | 360 |
| gtattcaaat | agtatggtca | acacttgttg | agacgctcga | aattgaacaa | cggatgcccc | 420 |
| tcaaaaatta | aaatggtcat | aacctttcac | | | | 450 |
| <210> <211> <212> <213> | 5306 283 DNA Glycine max | × | | | | |
| <400> | 5306 | | | | | |
| tgtaggatta | tggggtaccc | atcacatgtg | gtactaggtg | gcggtcgggc | gatggtgcac | 60 |
| aacaagtttt | ccacatccac | aatgcgcgca | taagcccacc | atcccctgtt | gcccacctcc | 120 |
| atctgagctc | acgtactccc | acgtagccca | tatcctcgtt | tctctcaaca | ccgggtcccc | 180 |
| atcaatcctc | ccaagcttcc | acaacatcca | agcaaaacag | cattcaaacc | gcacaagcta | 240 |
| tcacagccaa | gcaaaacaga | gcaaaggcag | aaaactctgc | caa | | 283 |
| <210> <211> <212> <213> | 5307 434 DNA Glycine ma: | × | | | | |
| <400> | 5307 | • | | | .* | |
| gcaagcttct | ttgtggggaa | gcataagatc | ccagtgaaca | tcctccaatt | tgctgatgaa | 60 |
| actagcgtta | tggagaagct | tctatggata | atgtcaaagc | tgtgaaggcc | attcttagaa | 120 |
| gctacgagat | ggttttaggc | ttgaaaatta | actttgccaa | aagccacttt | ggagcaattg | 180 |
| gacaatctga | agaatggtgt | tgttctgctg | ctggctatct | taattgtgcc | atgctccaat | 240 |

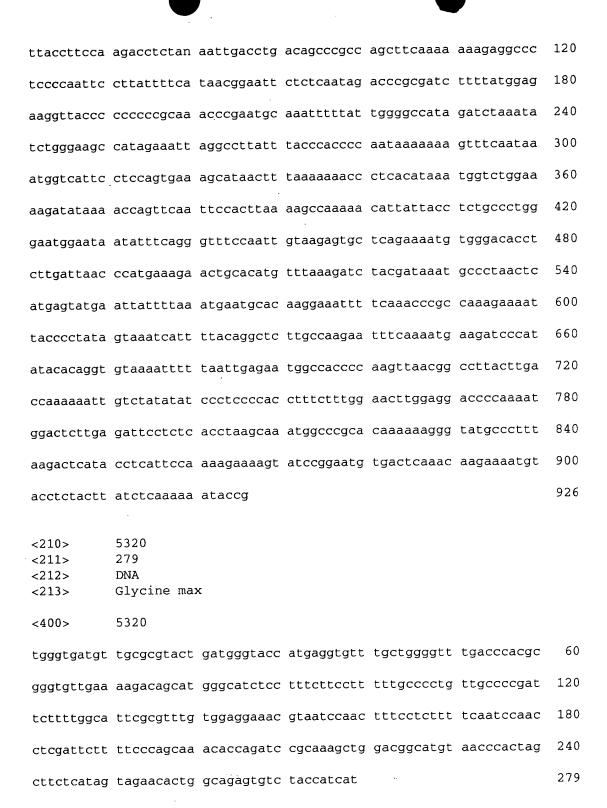
| tccccttttg | ctaccttggg | ttgcctatag | gcattaatcc | gagaagaaag | atggtatggg | 300 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| agcctatcat | aaaaaagttt | gaggctaggt | tgaacaagtg | gaatcaaagg | agcatctcta | 360 |
| tggctggaag | aatcaccctt | atcaatgctg | ttttaacagc | attacccttg | ttttacttgg | 420 |
| ccttttacag | ggct | | | | | 434 |
| <210> <211> <212> <213> | 5308 237 DNA Glycine max | K | | | | |
| <400> | 5308 | | | | | |
| gcctcaccat | tgtcacgtgt | ggatgcatca | atcgtctgct | gaggctatac | cagacatett | 60 |
| gcgccacgac | ttcaagctta | ccataacttg | cctgcgctcc | ttcttgcctg | ccgtatgtaa | 120 |
| cggagtcgtt | catacttgca | tgttcgacga | cttgcatgct | atgtcatact | atactgtgcc | 180 |
| actgtgagat | agattttacc | cctgctctct | ttcacatgat | cactcacttg | attgcgc | 237 |
| <210> <211> <212> <213> | 5309 427 DNA Glycine ma | x | | | | |
| <400> | 5309 | | | | | |
| agcttcatca | aatgaaacaa | agaaagactt | attaagtcac | ataattctac | taaccaccat | 60 |
| gatgtggttg | tttatcaatt | ctcactcaca | tcctactcat | ttccatttct | aattttgtaa | 120 |
| tcagttatca | ttggtcagct | gtcattggaa | cttccaaaat | tcagtggtca | tacaacattt | 180 |
| tagtcaggat | gacttttggg | agtacccctc | accatagtac | aatggcaggc | tctcaccaac | 240 |
| atggttatgc | ctcacatttg | tcgggatttt | caagttagca | ttatggaaaa | cacaaccaca | 300 |
| aatgcaccac | cacattccca | agaaagaaca | agtcagccag | caaacctcag | taccaatctg | 360 |
| tgtggtcacc | caaaaactct | gaggactaat | tcctcaatga | ctttccccat | ggggattcgt | 420 |
| cttttat | | | | | | 427 |
| <210> <211> <212> <213> | 5310 284 DNA Glycine ma | x | | , | | |

| | • | | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5310 | | | | | |
| ttgcaaaagc | cttgttgatt | aagggcaaga | ggtcaaaaca | ccttccaaac | catgtcaagg | 60 |
| acaaggtctc | tgatccaggt | ttcaaatcca | atgctaattg | gtcaattgat | ttggacacat | 120 |
| aggatttaaa | cgcaagaagt | gaagatgata | actcctctgg | ttgaggatgt | gtaatggcat | 180 |
| ggtggcgatt | ctccagcttg | aagttgaagt | aacgttttgc | aagtttctct | gtcaaaagta | 240 |
| ccattagtta | ttggaagcta | actagaacac | agcgatgatg | atgc | | 284 |
| <210> <211> <212> <213> | 5311 439 DNA Glycine max | · ĸ | | | | |
| <400> | 5311 | | | | | 60 |
| | | | | gaactaccct | | 60 |
| | | | | atattacagc | | 120 |
| | | | | ccgttggatc | | 180 |
| ttttactgga | ggttcctagt | acataagtct | acattttgac | cgttgggatt | cgctagaaaa | 240 |
| tgtccagaac | ccaatatgta | ctacctttcc | cataaccagc | aatgcacaag | catttttctg | 300 |
| cacatttaga | aaattctgct | gcacaaattt | gacagctttt | tgctgcacaa | tttggcagat | 360 |
| ttcgaaatcc | atcttaccca | catccaattt | ttctcaaatt | ggatcctaca | agtcctaaat | 420 |
| catgtataaa | tcatattta | | | | | 439 |
| <210> <211> <212> <213> | 5312 284 DNA Glycine ma: | × | | | | |
| <400> | 5312 | | | | | |
| tgaactcctt | ccatataggg | acctagatga | gctagtccaa | ctttgtataa | gagtggagca | 60 |
| acaacttaaa | agaaagcctt | cttcaaaatc | ttatggcttt | cactettate | caaggaaaga | 120 |
| caaagcccaa | ggaattttgg | gggcttcacc | ttcaaaaccc | aaggaagata | agggtaagac | 180 |
| cataaagaaa | tccaccccta | agactagttc | ccaagaaagg | actagcaaca | ttaaatgctt | 240 |
| caaatgtctt | gggagaggtc | acattgtctc | ccaatgcccc | acaa | | 284 |
| | | | | | | |

| <210> <211> <212> <213> | 5313 551 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|------------|------------|-------------------------|------------|-----|
| <223> <400> | unsure at al 5313 | l n locati | ons. | | | |
| agcttattgt | taaacaatca a | ntaaatttag | ggttaatgaa | cctattacat | tatanatgaa | 60 |
| ggttatggtt | gaaaacttga c | caatgtctcc | tattgtggga | aagtcttttt | gaccgttaga | 120 |
| tataatgatt | ttaaaattaa o | eggaagactt | aactatgtct | cctatcaact | tctcaaaaaa | 180 |
| aaatgtctct | tatcaatttc t | caaaaaaaa | aaaaaagttt | cctatcatgc | ttataaaaaa | 240 |
| atgtctccta | ttgggagaaa a | atcgtttttg | accactagat | atgttggttt _. | taaagtcaat | 300 |
| ggttgacatt | tttttttcc t | tttatttt | tcatttttct | taatctttct | taatttaccc | 360 |
| cttttcctt | tatgtattcc t | ttttctctt | tttgctagat | ttctctcaac | atacttttta | 420 |
| gtaggtaacc | caatattact o | ctaaattgaa | tttactctta | aaaatatatt | ttgagggatc | 480 |
| catccaaaaa | ttaaattccc 1 | tcttagaaaa | accaattgaa | gaatggaagt | ggcatttttc | 540 |
| taaattttt | t | | | | | 551 |
| <210> <211> <212> <213> | 5314 500 DNA Glycine max | | | | | |
| <400> | 5314 | | | | | |
| agctttttat | tgtaatcttg | aaattcagga | caacactctg | atttctgaaa | tttttgggat | 60 |
| atttatggtc | attgaccagt | cccttttcca | tgacttaacc | aaattaccca | gtgacggtgt | 120 |
| accatttgaa | agcacactaa | atgacgactg | gaaatttgat | ttctctgccc | atgatgcccg | 180 |
| ccagttggtt | tgcaccaaca | atgcagatat | gaccggacgt | cttcttgtcg | ggtcattggc | 240 |
| ttttgaaago | cgcatccttc | actatttaat | tgtgcgtatt | ctgcttccac | ggtcttccaa | 300 |
| ccttgcccag | gtttctgagg | aagatctaat | tatcatgtgg | gcccttcata | cagggcgtca | 360 |
| acttgactgg | gcacacttag | tcagatatcc | catgcataag | gcattgcgaa | taaatgctcc | 420 |
| actaccatat | cccacacttq | tcactctctt | tttccgccat | ttcaaaatcc | ctcttgatct | 480 |

| gaacccttat | gttccaatca | 500 |
|-------------------------|--|-----|
| <211> <212> | 5315 280 DNA Glycine max | |
| <400> | 5315 | |
| toggaagaaa | gtgatgaggt acaagcccta aaggcaaagc ttgaaagagc ccgggtagtc | 60 |
| aaagagaagt | tcaagtccat agccatcaaa gtctgaagag agtatgatga actaagggac | 120 |
| gtcaatatgg | ccaccgatga agccttggaa tgagaaacca agaaggcccg aaaggaagaa | 180 |
| cacgaccaaa | acaagttttg aggggcttta tagggcagca atagtgagct caagctccaa | 240 |
| agaggtgaaa | ggaatcatca cgggtcaaag gcatgatctt | 280 |
| <210> <211> <212> <213> | 5316 353 DNA Glycine max | |
| <400> | 5316 | |
| agcttcaccg | gatgatgccg atcgaacatt tcctaatcga catcatccaa ttgttattca | 60 |
| gggattgaat | agaataaaca atggccagtg tcggtcctta tatggccccg actgatatct | 120 |
| ttcagccgac | attgggcaat ttcttttaca aatggtggcc gataatgttc ttttttacg | 180 |
| ataaaggaag | ttttttgttt tggtgttgcc taaaaaattt acaacttatg tcggctaggt | 240 |
| ttttccgtgc | gageteagee gagggttegt teegaeggae aetggeatgt tgttettete | 300 |
| atttaagagg | gcaagaaaac gttggcccat cccgaccaaa acaaaaaaaa aaa | 353 |
| <210> <211> <212> | 5317 276 DNA | |
| <213> | Glycine max | |
| <400> | 5317 | |
| tccatcaagt | : tatgaccatt tgaatttctc gagatcttcc gtggttcaat ttcgggcgtc | 60 |
| tccatatgtc | atgtgcctga atcggacctc cgtaagaaaa tttatgacca tttgaacttc | 120 |
| tctagagctt | ccgttgttta atttcgagct tctcgatatc tgatgtgcct gaatcggaca | 180 |

| | ₹ <u>.</u> | | | | | |
|-------------------------|-----------------------------------|------------------|------------|------------|------------|------------|
| tccgagtgaa | aagttgggac | aatttcaatt | tctccagagc | ttccgttgtt | caattttgag | 240 |
| cgtctcgata | tgtgatgttc | ctgaatcgga | cctccg ' | | | 276 |
| <210> <211> <212> <213> | 5318 894 DNA Glycine max | | • | | | |
| <223> <400> | unsure at a 5318 | ll n locati | ons | | | |
| naacacggaa | aggaactcta | cataaccacc | agacaagaaa | natgaatcat | gacgaccgcg | 60 |
| gaccttagag | acgacccgca | gcatgcaagc | cgagcgttat | catgcatgct | aaggcaacag | 120 |
| agaagccgaa | ctcactcacg | aatgaacgcc | aaggggaaat | acaagataaa | tcccccccac | 180 |
| ccgaacaaaa | gtgaacactc | ggtgaagaca | cctcgcaccg | taaagaagct | gggacgagcc | 240 |
| caaacgggaa | aaagaattga | accgcaagaa | aacacccgat | ctgggtggga | acaaaaaaa | 300 |
| acggggccaa | accaaccacc | gagagcaagc | atctggaata | aaaagggcat | cagcccaccc | 360 |
| ccacatggaa | cacacaaggc | gcccaaacag | aaaaaaccca | accgaaaact | aatatcaaac | 420 |
| catcaaaaac | ccaaagcgcc | cccacaagaa | cgatccaagc | cccgcaaagg | cacgggtact | 480 |
| tcacaaccac | cccatgcgaa | gcaagaggaa | cccacatgca | gacagaaacc | ccaacatcac | 540 |
| ccctaaataa | gaacaatgca | agccaattcc | ggaaaggaca | acgaaaccaa | aggggggcaa | 600 |
| cacacacggg | tccggcccaa | caaccaaaaa | aggggggcaa | acagacagcc | agcgtcaggg | 660 |
| gggggcccag | caaaaaaaaa | ccgaccgcaa | aggagcaaac | ccgagaggga | aaagggaaca | 720 |
| ccaacagcga | caggtcgagg | ataaaaaaaa | tatccctcta | acacaaagac | aaatcccgtc | 780 |
| ataggaaccg | gcgaaaaaaa | cacacttgca | aacactcgga | gggcagaaga | aagaaaaaca | 840 |
| caacacaccc | acacactcac | ccctccccta | tcaggggggg | gggacccaaa | cacc | 894 |
| <210> <211> <212> <213> | | x all n locat | ions | | | |
| <400> | 5319 | | | | | C O |
| taccctccga | attcgtactc | taacttgaat | acacnetece | cacgtcgccc | nttganttga | 60 |



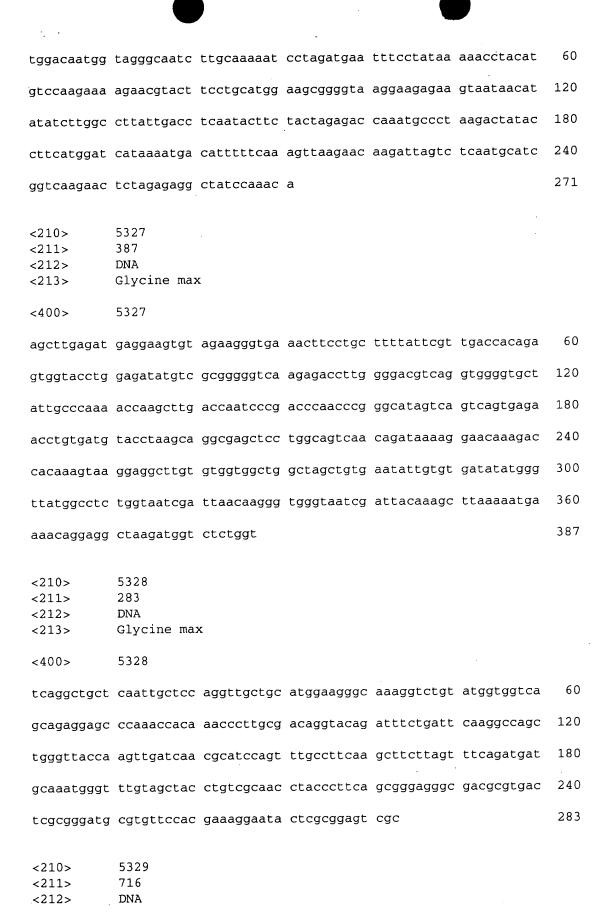
<210> 5321 <211> 517

<212> DNA

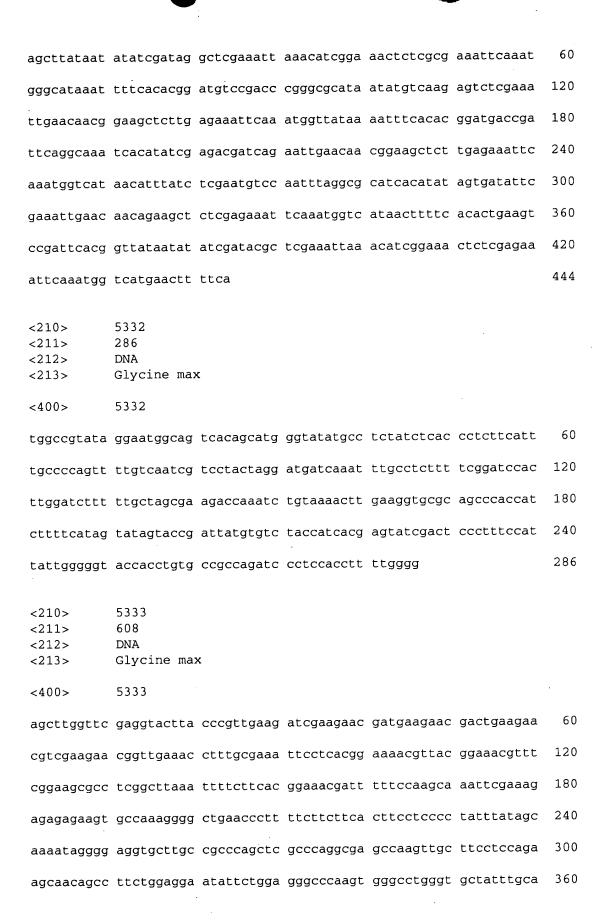
<213> Glycine max

| aggtettette tigtitettee eccatitiaa aacacatit teetaatia eccaticaa 60 aggtgettge aaggtactaa aattetteae aaategteta tgaaaactit teaceteagt 120 cacactiteta ggtgeaggee actetiggat agcetigace titteetitat caacitigaae 180 ceettiggaa etactacaa aaceaagaaa cacaacatgg tetitgeaaa aaaatacatt 240 titeaaggit agcatacaat titteetitee taaggeacaca caacacegat titaagtigig 300 caacatgeaa atcaaggit gigetataaa caaggatate atcaaagite accaceacaa 360 attiaceaat gaatietete aagacatgit teatiaatee catagaaaatg etiggageat 420 tagteaaact gaaaagcata accaaceati eatataatee atatitagit tigaaagegg 480 gitteeatit eteeeette titaateetta titgati 517 <210 | <400> | 5321 | | • | | | |
|---|------------|------------|------------|------------|------------|------------|-----|
| cacacttcta ggtgcaggcc actcttggat agccttgacc ttttctttat caacttgaac 180 ccctttggaa cttactacaa aaccaagaaa cacaacatgg tctttgcaaa aaaatacatt 240 tttcaaggtt agcatacaat tgttccttcc taagcacaca caacaccgat tttaagtgtg 300 caacatgcaa atcaagggtt gtgctataaa caaggatatc atcaaagttc accaccacaa 360 atttaccaat gaattctctc aagacatggt tcattaatct catgaaaatg cttggagcat 420 tagtcaaact gaaaagcata accaaccatt catataatcc atattagtt ttgaaagcgg 480 gttttcattt ctctccttct ttaatcctta tttgatt 517 <210 | agcttcttct | tgtttcttcc | cccattttaa | aacaacattt | ttcttaatta | cctcattcaa | 60 |
| ccctttggaa cttactacaa aaccaagaaa cacaacatgg tctttgcaaa aaaatacatt 240 tttcaaggtt agcatacaat tgttccttcc taagcacaca caacacggat tttaagtgtg 300 caacatgcaa atcaagggtt gtgctataaa caaggatatc atcaaagttc accaccacaa 360 atttaccaat gaattctctc aagacatggt tcattaatct catgaaaatg cttggagcat 420 tagtcaaact gaaaagcata accaaccatt catataatcc atatttagtt ttgaaagcgg 480 gttttcattt ctctccttct ttaatcctta tttgatt | aggtgcttgc | aaggtactaa | aattcttcac | aaatcgtcta | tgaaaacttt | tcacctcagt | 120 |
| tttcaaggtt agcatacaat tgttccttcc taagcacaca caacaccgat tttaagtgtg 300 caacatgcaa atcaagggtt gtgctataaa caaggatatc atcaaagttc accaccacaa 360 atttaccaat gaattctctc aagacatggt tcattaatct catgaaaatg cttggagcat 420 tagtcaaact gaaaagcata accaaccatt catataatcc atatttagtt ttgaaagcgg 480 gttttcattt ctctccttct ttaatcctta tttgatt 517 <210 | cacacttcta | ggtgcaggcc | actcttggat | agccttgacc | ttttctttat | caacttgaac | 180 |
| caacatgcaa atcaagggtt gtgctataaa caaggatatc atcaaagttc accaccacaa 360 atttaccaat gaattctctc aagacatggt tcattaatct catgaaaatg cttggagcat 420 tagtcaaact gaaaagcata accaaccatt catataatcc atatttagtt ttgaaagcgg 480 gttttcattt ctctccttct ttaatcctta tttgatt 517 <210> 5322 <211> 286 <212> DNA <213> Glycine max <400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt gttatcagta cttaattcta 120 atgggcttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagcat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggt gtgatttcgg 60 | ccctttggaa | cttactacaa | aaccaagaaa | cacaacatgg | tctttgcaaa | aaaatacatt | 240 |
| atttaccaat gaattctctc aagacatggt tcattaatct catgaaaatg cttggagcat 420 tagtcaaact gaaaagcata accaaccatt catataatcc atatttagtt ttgaaagcgg 480 gtttcattt ctctccttct ttaatcctta tttgatt 517 <210> 5322 <211> 286 <212> DNA <213> Glycine max <400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt ggttatcagta cttaattcta 120 atgggcttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atgggttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattat caacatcaca gaggtttgtg actactggt gtgattcgg 560 | tttcaaggtt | agcatacaat | tgttccttcc | taagcacaca | caacaccgat | tttaagtgtg | 300 |
| tagtcaaact gaaaagcata accaaccatt catataatcc atatttagtt ttgaaagcgg 480 gttttcattt ctctccttct ttaatcctta tttgatt 517 <210> 5322 <211> 286 <212> DNA <213> Glycine max <400> 5322 tcccagctat ggaagactaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgttcatg tgttcactgt gttatcagta cttaattcta 120 atggccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | caacatgcaa | atcaagggtt | gtgctataaa | caaggatatc | atcaaagttc | accaccacaa | 360 |
| gtttcattt ctccctct ttaatcctta tttgatt 517 <210> 5322 <211> 286 <212> DNA <213> Glycine max <400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgttcatg tgttcactgt gttatcagta cttaattcta 120 atgggcttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggt gtgatttcgg 60 | atttaccaat | gaattctctc | aagacatggt | tcattaatct | catgaaaatg | cttggagcat | 420 |
| <pre><210> 5322 <211> 286 <212> DNA <213> Glycine max </pre> <pre><400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt ggttatcagta cttaattcta 120 atgggccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 </pre> <pre><210> 5323 <211> 461 <212> DNA <213> Glycine max</pre> <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | tagtcaaact | gaaaagcata | accaaccatt | catataatcc | atatttagtt | ttgaaagcgg | 480 |
| <pre><211> 286 <212> DNA <213> Glycine max <400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt gttatcagta cttaattcta 120 atgggccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60</pre> | gttttcattt | ctctccttct | ttaatcctta | tttgatt | | | 517 |
| <pre><211> 286 <212> DNA <213> Glycine max <400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt gttatcagta cttaattcta 120 atgggccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60</pre> | | | | | | | |
| Cagggtacga taacctagtg trigatagt tatgettaa tgcggt tocatggtacggtacgggtacggggggggggggggggggg | <210> | 5322 | • | | | | |
| <pre><213> Glycine max <400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgttccatg tgttcactgt gttatcagta cttaattcta 120 atgggcttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggt gtgatttcgg 60</pre> | <211> | 286 | | | | | |
| <pre><400> 5322 tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat</pre> | <212> | DNA | | | | | |
| tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt gttatcagta cttaattcta 120 atgtgccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | <213> | Glycine ma | x | | | | |
| tcccagctat ggagagctaa atcctcagtt ggttcttcct atggggtact tgatgtaaat 60 actttcatat ctatttaatg atgtttcatg tgttcactgt gttatcagta cttaattcta 120 atgtgccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | | | | | | | |
| actttcatat ctatttaatg atgtttcatg tgttcactgt gttatcagta cttaattcta 120 atgtgccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtattt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | <400> | 5322 | | | | | |
| atgtgccttt gccttgatca cataactgca accgtagtta gggtcactca acattgggaa 180 atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtatttt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | tcccagctat | ggagagctaa | atcctcagtt | ggttcttcct | atggggtact | tgatgtaaat | 60 |
| atggtttgat ccttaaaacc tgataggaca gagctagctt atcgtatttt catgagacat 240 cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | actttcatat | ctatttaatg | atgtttcatg | tgttcactgt | gttatcagta | cttaattcta | 120 |
| cagggtacga taacctagtg tttgatatgt tatgtcttaa tgcggt 286 <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | atgtgccttt | gccttgatca | cataactgca | accgtagtta | gggtcactca | acattgggaa | 180 |
| <pre> <210> 5323 <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60</pre> | atggtttgat | ccttaaaacc | tgataggaca | gagctagctt | atcgtatttt | catgagacat | 240 |
| <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | cagggtacga | taacctagtg | tttgatatgt | tatgtcttaa | tgcggt | | 286 |
| <211> 461 <212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | | | | | | | |
| <pre><212> DNA <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60</pre> | <210> | 5323 | | | | | |
| <213> Glycine max <400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | <211> | 461 | | | | | |
| <pre><400> 5323 gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60</pre> | <212> | DNA | | | | | |
| gcttaaggac tatgattatt caacatcaca gaggtttgtg actactggtg gtgatttcgg 60 | <213> | Glycine ma | x | | | | |
| gcttaaggac tatgattatt taatattata gaggettigeg accaeoggeg gegins 1935 | <400> | 5323 | | | | | |
| | gcttaaggac | tatgattatt | caacatcaca | gaggtttgtg | actactggtg | gtgatttcgg | 60 |
| caacccctgt tcgcaaaccg tggcgaattg gtctccccat tgagaagtat gaggatgctt 120 | | | | | | | 120 |
| acaagttggt ctactgtcca agtgtgtgca acgattgcag ttatccatgc ggtgatattg 180 | | | | | | | 180 |
| gaatatacca agatgaatat ggcaagcgtc ttgctctaag ttctgaacca tacaaagtga 240 | | | | | | | 240 |

| | | | | ******* | 225422524 | 300 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| agttccagcg | ggcttaatta | ttgaattgat | aacaaaacca | attaaagaat | aatyaataay | |
| tgtaatgaac | tactttatgc | ttttgctgca | tatatggtaa | ttctcatgtt | gagttccttg | 360 |
| ccacggactt | gataataaat | aaacaagtta | ctttctattt | ttagtctttc | caaaatttct | 420 |
| tgtttctgtt | cgtctttgtc | attgtttgca | tttgggatgc | a | • | 461 |
| <210> <211> <212> <213> | 5324 291 DNA Glycine max | κ | | | | |
| <400> | 5324 | | | | | |
| tttattggat | tctacatttc | aagagaaaaa | aacagctgaa | actcttgtga | gtaaagggtc | 60 |
| tccaaagaaa | accaaaaaca | actgaacaag | caacaattgc | agaaacacaa | aggaatattt | 120 |
| gcattcattc | atcatcattt | catctctaat | tcctcgttcc | aacaaatcat | gaaacaacgt | 180 |
| gtctctgtta | gcatcttcag | aaacttggca | atgttccata | aatggataag | ataactcgaa | 240 |
| aataaaagct | caaaactttc | tgaaacaaat | gagaaaaatg | gtccattgat | t | 291 |
| <210> <211> <212> <213> | 5325 326 DNA Glycine ma: | × | | | | |
| <400> | 5325 | | | | | |
| agcttgtttc | agaggcgtgg | agtttactat | cagataaggt | caaaagacta | gcatataacc | 60 |
| agaacaggag | attggaagga | tttcacgata | atgctcccaa | caagaatggt | tatataaaac | 120 |
| ttaacaagaa | tgcaacttcc | agcatgagaa | caggaaataa | tgatgctcgg | gcacatccac | 180 |
| atccgcatac | accctccatt | cctcctccac | atacaaatgc | tggtaccttt | tggactatct | 240 |
| gtaataagtg | caagacacat | tatgaatatc | tcaggacata | tttgaatcaa | acccttttat | 300 |
| gtcccaattg | taaacaagct | tttgtg | | | | 326 |
| <210> <211> <212> <213> | 5326 271 DNA Glycine ma | × | | | | |
| | 5326 | | | | | |



| <213> | Glycine max | c | | | | |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctntgatg | caacatttgg | agaggttaat | gaaacaacga | gatgatgcgc | tccatgagag | 60 |
| gttggatcaa | atggagaata | gagatcatcc | tgaagaagaa | aggaggaaaa | gaaggaatga | 120 |
| tggtgttcct | aaacaaaacc | gaattgatgg | tattaaactc | aacattcctc | catttaaagg | 180 |
| aaagaatgat | ccggaagcct | acttggagtg | ggagatgaaa | atagagcatg | ttttctcatg | 240 |
| caacaactat | gaggaggacc | aaaaggtgaa | gcttgccgcc | acggagtttt | ccgactatgc | 300 |
| tcttgtgtgg | tggaagtgat | tatgcaagtt | gaagtggacg | tttccattgg | gaaatacaat | 360 |
| gataaggtac | tttgtgatgt | tgttcctatg | gaggccagtc | acttactttt | ggggagacca | 420 |
| tggcaatttg | ataaaagagc | ccatcatgac | ggttacacca | accagatctc | tttcattact | 480 |
| ttggtgttgc | ataaaaaatg | tacacatgta | gtcggctagg | ttttttgtcc | caaccttacc | 540 |
| cactttttgt | ttctagccaa | attggcttgt | tccattattt | tgcccggaaa | aatttacccc | 600 |
| ctttgcaaaa | aaatattgct | ttcaacttat | gcctttttt | tagggatgaa | ctgaaccttt | 660 |
| ttcccgcatt | gtcggtaaat | accccaatta | atctttcgcc | cccttgccaa | ttttt | 716 |
| <210> <211> <212> <213> <400> | 5330 280 DNA Glycine ma: | x | | | | |
| | | taacttttca | cacgaatgtt | ccattttggg | acataagata | 60 |
| | | caaccgaaac | | | | 120 |
| | | ggacataact | | | | 180 |
| | | gtcataacat | | | | 240 |
| | | tgaacagcgt | | | | 280 |
| <210> <211> <212> <213> <400> | 5331 444 DNA Glycine ma | x | | | • | |



| ccccatttt | tactaagtac | accccctct | gcttttttt | ggtgattctt | tttttgtaaa | 420 |
|-------------------------|-----------------------------------|------------|------------|------------|-------------|-----|
| gttacggaaa | cttaccaatt | tcgtaacgac | acttgttttc | tttccggaat | .ggtaccgaac | 480 |
| cctgcggatt | acataatcat | tccccttttt | gacttacgga | aggtacggga | ccttccttaa | 540 |
| ttatgccacg | aagcttccat | ttgatttccg | gggggcaccg | aaattaccgg | ttggggcata | 600 |
| atattttt | | | | | | 608 |
| | 5334 286 DNA Glycine max | × | | | | |
| | 5334 | | | | | 60 |
| tgacatgagg | aagcgtggaa | gggtgagact | tccttctttt | attgttgacc | acagagtggt | 60 |
| acctgaagat | atgtctcggg | ggtcaagaaa | ccttggggac | gtcaagtggg | gtgctattgc | 120 |
| ccaaaaccaa | gcttgaccag | tccctaccca | acccgggcat | attcactcag | tgagaacctg | 180 |
| tgatgtacct | aaacaagcga | gctcctggca | gtctacagat | taaaaaacta | agaccacaaa | 240 |
| gcaagggggc | ttgtatggtg | gctggccaac | tgtgaatctt | gtgtga | | 286 |
| <210> <211> <212> <213> | 5335 376 DNA Glycine ma: | x | | | | |
| | | cttcagattg | ttacacaaaa | gggcaaaggt | ctgtgtggtg | 60 |
| | | | | | | 120 |
| | | | | | tattcatggc | 180 |
| • | | | | | tagtctcgcc | |
| | | ctacttcatg | | | | 240 |
| | | | | | cttcagcagg | 300 |
| ggtcatgtct | ccaaaggctc | caccactggc | aacatctatc | atacttctct | ccatgttgct | 360 |
| cagtccttca | taaaaa | | | | | 376 |
| <210> | 5336 | | | | | |

| <212> <213> | DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5336 | | | | | |
| tgtctcagcg | tttatgcgag | acagagacca | acatgttagc | tatcgtcgcc | aagtaccaag | 60 |
| aagagttagg | tctagccacg | gcccacgagc | atagaatcgc | ggatgagtat | gcccaagtgt | 120 |
| atgcggaaaa | agaggctaga | ggaagggtga | tcgactcttt | acaccaagag | gcaaccatgt | 180 |
| ggatggatcg | gtttgctctt | accttgaacg | ggaggcaaga | acttccccga | ttgttagcca | 240 |
| aggccaaggc | gatggcagac | acctactccg | ccccgaag | | | 279 |
| <210> <211> <212> <213> | 5337 856 DNA Glycine max | : | | | | |
| <400> | 5337 | | | | • | |
| tttgaattga | tatccatctc | gaccccggga | tccttatagt | cgaccctgca | gcattcaagc | 60 |
| ttcttgtggt | accgctcttg | gggctcaaaa | atacccaaaa | caaaatcctc | ttattactat | 120 |
| ctattttgaa | ttctttacct | cccgaacgga | caacctttaa | attggtgctt | gttcccctct | 180 |
| ttgagaatga | ggaggatctt | cataggactt | catccaattg | atgtttttcg | cccagtttat | 240 |
| atatccaccc | cccctttttt | tttgtgacta | acaatgtaca | tgttgtctaa | cgcaacatct | 300 |
| atgatgatga | cctcaaggtg | atggttttct | cacaccgtgt | atccagttta | gtttttttgt | 360 |
| ggtggacgat | gatcctctat | tattaccgcg | acggttccct | atgcggtgcc | ccttgaacag | 420 |
| ttacgcattt | atgtctattc | tatggaggct | attatactct | attatactga | aactatgtac | 480 |
| ttatttacaa | aagccattct | taccggttcg | acccactgat | cgatttatag | atctgtatgg | 540 |
| tcacttaaaa | gttgctaagt | tcggtttgta | tggatctaca | gtggccaatt | atagatatga | 600 |
| tctaatgcca | taaagagtgg | atctatgttt | tgcaaacatt | gaaacgtata | cttactagac | 660 |
| tacgattcct | aatttcccta | catactgctt | ccatcccact | cgccttgtgt | atctattgca | 720 |
| actctacagt | tttcattcca | ttcgatctgt | tcattttatc | tgaactgact | cggtacggtt | 780 |
| cgatgccact | ctacaggtta | tacctagata | ctagacacta | aacgttcgag | ctaaaattac | 840 |
| ttaccatcaa | tatacc | | | | | 856 |

| | | | • | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5338 280 DNA Glycine max | | | | | |
| <400> | 5338 | | | | | |
| tgtaggatta | tggggtaccc | atcacatgtg | gtactaagtg | gcggacgggc | gatggtgcac | 60 |
| aacaagtttt | ccacatccac | aaagcgcgca | taaacccacc | atcccctgtt | gcccacctcc | 120 |
| atctgagctc | acgtactccc | acgtagccca | tatcctcgtt | tctctcaaca | ccgggtcccc | 180 |
| atcaatcctc | tcaagctttc | acaacatcca | agcaaaacaa | cattcaaacc | gcacaagcta | 240 |
| tcacagccca | gcaaaacaga | gcaaaggcag | aaaactctgc | | | 280 |
| <210> <211> <212> <213> | 5339 417 DNA Glycine max | ς | | | | |
| <400> | 5339 | | | | | |
| agcttggtta | tctccttctt | cactacatca | ataatcaccg | ggttgagtct | tctctgttgc | 60 |
| tggcttactg | gtttagctcc | atcctctcca | tttattcgat | gcatacatgt | ggatgggcta | 120 |
| ataccacgaa | tgtccgccag | ggtccagcct | atageettet | tatgcttctt | gagaactaac | 180 |
| aacaacttct | cctcttgctc | atcagcaagg | gaggcagata | taatcactgg | aaaactcttg | 240 |
| ctatcatcca | agtaagcgta | ttttaaattt | tatggcagag | gcttcaattc | tggtgtggtc | 300 |
| aactggacag | tggtagaaag | agatggtttc | ttagccttta | cctcataaag | aaaagcagat | 360 |
| gtatgtgtac | tttttgaaac | tggttagtcc | tatctgactc | tataaaatca | atctcaa | 417 |
| <210> <211> <212> <213> | 5340 280 DNA Glycine max | κ | | | | |
| <400> | 5340 | | | | | |
| tgtctcagcg | tttatgcgag | acggagacca | acatgctagc | tatcatcgcc | aagtaccaag | 60 |
| tagagttagg | tctagccacg | gcccacgagc | ataagatcgc | ggacgagtat | gcccaagtat | 120 |
| acacggaaaa | agaggctata | agaaaggtga | tcgactcttt | acaccaagag | gcaaccatgt | 180 |
| ggatggatcg | gtttgccctt | accttgaacg | ggagtcaaga | acttccccga | ttgttagcca | 240 |
| | | | | | | |

| aggcccaggc | gatggcggac | acctactccg | ccccgaaaa | | | 280 |
|---|--|---|---|--|--|-------------------------|
| <210> <211> <212> <213> | 5341 490 DNA Glycine max | · · | | | | |
| <400> | 5341 | | | | | |
| atataggggg | agtaaacgca | catttttatc | tatatacaat | tgtttggtgc | ttgcttgaat | 60 |
| cttgatttca | ggtattgtat | tgtcatcatc | aaaaaggggg | agattgtaga | tgcaattgct | 120 |
| tttgatgttt | tgatgatgat | catgatgata | tgatgcaatt | gatgaaaatg | ggcttttcaa | 180 |
| gattaaattc | aagacaatac | ttcaagatta | caagtcacaa | catcaagatg | atcactagta | 240 |
| tattaggaag | ggaattccta | attgaattag | caaaaggttt | ggccaagtaa | tttaaattaa | 300 |
| aaaatgtttt | acaaaggttt | tactctcttg | taatcgatta | ccagaagatg | taatcgatta | 360 |
| ccagtggcca | aatatatttt | ataacagcta | ctaacatttg | aattcggaaa | tttagactgt | 420 |
| gtaatcgatt | acacaatttt | ggtaatcgat | taccagtacg | tagtaaacgt | tttaatttaa | 480 |
| | | | | | | |
| attttaaaag | | | | | | 490 |
| <210> <211> <212> <213> | 5342 572 DNA Glycine max | × | | · | | 490 |
| <210> <211> <212> | 5342 572 DNA Glycine max | x all n locat: | ions | | | 490 |
| <210> <211> <212> <213> <223> <400> | 5342 572 DNA Glycine max | all n locat: | | taaaagatta | aattctaatt | 490 |
| <210> <211> <212> <213> <213> <400> gtgaaattaa | 5342 572 DNA Glycine max unsure at a 5342 | all n locat: gttggtggag | tattaatttt | | | |
| <210> <211> <212> <213> <213> <400> gtgaaattaa ttgatctcta | 5342 572 DNA Glycine max unsure at a 5342 acggatcttt | gttggtggag tctacaattt | tattaatttt tggtcttcta | tattttaatt | gatacatttg | 60 |
| <210> <211> <212> <213> <223> <400> gtgaaattaa ttgatctcta attccctgga | 5342 572 DNA Glycine max unsure at a 5342 acggatcttt gttttataaa | gttggtggag tctacaattt tgtgattttg | tattaatttt tggtcttcta gttgtttagt | tattttaatt | gatacatttg | 60 |
| <210> <211> <212> <213> <223> <400> gtgaaattaa ttgatctcta attccctgga | 5342 572 DNA Glycine max unsure at a 5342 acggatcttt gttttataaa ttcttaaact | gttggtggag tctacaattt tgtgattttg taaagagttt | tattaattt tggtcttcta gttgtttagt aaaatatatt | tattttaatt tatctggcat aaacagattt | gatacatttg ccattgacgg aggcggtttt | 60 120 180 |
| <210> <211> <212> <213> <213> <400> gtgaaattaa ttgatctcta attccctgga ttgaccagaa caactgccgg | 5342 572 DNA Glycine max unsure at a 5342 acggatcttt gttttataaa ttcttaaact attgcttgac | gttggtggag tctacaattt tgtgattttg taaagagttt tcaccctttc | tattaattt tggtcttcta gttgtttagt aaaatatatt cccgctaaga | tattttaatt tatctggcat aaacagattt caaatcagat | gatacatttg ccattgacgg aggcggtttt cctaatcttc | 60 120 180 240 |
| <210> <211> <212> <213> <213> <400> gtgaaattaa ttgatctcta attccctgga ttgaccagaa caactgccgg aatggcacag | 5342 572 DNA Glycine max unsure at a 5342 acggatcttt gttttataaa ttcttaaact attgcttgac aaattgcttc | gttggtggag tctacaattt tgtgattttg taaagagttt tcaccctttc atccaccaat | tattaattt tggtcttcta gttgtttagt aaaatatatt cccgctaaga gaaccaattt | tattttaatt tatctggcat aaacagattt caaatcagat tttccgacac | gatacatttg ccattgacgg aggcggtttt cctaatcttc tagcaacata | 60 120 180 240 |

| ttttaattta | tagaaactaa | tatgtaataa | taacgcgtct | tttaattttt | tatatattat | 540 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ccaatcacaa | acattataaa | gttattaatt | tt | | | 572 |
| <210> <211> <212> <213> | 5343 462 DNA Glycine max | κ | | | | |
| <400> | 5343 | | | | | |
| agcttgctaa | cccatggaag | cttgataacc | cattcttctt | tccttaagac | atgatgcata | 60 |
| agcctcataa | aggtgcttgg | tgcattaatg | agcccaaaaa | gcatcactag | ccattcatac | 120 |
| aaaccaaact | tggtcttgaa | agcggttttc | cactcatcac | cctttttcat | cctgatttgg | 180 |
| tgataaccac | ttttaagatc | aatttttgaa | aaggtattgg | caccatgcaa | ctcatcaaga | 240 |
| aaatcatcaa | gtctaggaat | ggggtgccta | tactttacag | tgatgttgtt | gatggccctg | 300 |
| caatctgtac | acattctcca | tgtaccatcc | tttttgggca | ccaacaacac | tggcacaaca | 360 |
| catgggctta | ggctctcttg | gacccaaccc | ttctccaaca | attctttaac | ctgagactct | 420 |
| atctctttag | tctcccgagg | gttagtccta | ttggctggcc | ta | | 462 |
| <210><211><212><213> | 5344 373 DNA Glycine max | ĸ | | | | |
| <400> | 5344 | | | | | |
| aatcagagca | caagagcttc | aagtaggtgc | tccttaaacc | tccattaatt | ttttttcttt | 60 |
| accttctctt | ccattgttgg | ttcttcattt | ttctccatgt | atctcctcac | atgtcttgtt | 120 |
| ctaaatgttg | ttaacatgat | tctttaaagt | ttccacctat | taaacttgct | atagaagcta | 180 |
| gatttgattt | tctatggctc | aaatttcttg | ttcttgttct | tgaaccatga | attgtgatga | 240 |
| gtttaagttc | ctttgagttt | tgccttgcta | tttttttgt | ggctgaaacc | taaaccatat | 300 |
| aattcttaca | aaaatattaa | agtagaagaa | aacctcaaaa | atctatagag | acttgttcac | 360 |
| ctattgtagt | ttt | | | | | 373 |
| <210> <211> <212> | 5345 536 DNA | | | | | |

| <213> | Glycine max | ; | | | | |
|---|---|---|---|--|--|--|
| <223> <400> | unsure at a 5345 | ıll n locati | lons | | | |
| agcttgcctg | tccgatgtag | cagtaatgat | ggcccgagtt | atgttgggga | acggttacga | 60 |
| acccggaatg | ggtttaagca | aagacaacgg | cggcataact | agcctgataa | atgccaaagg | 120 |
| aaatcgtggg | aagtagggtt | taggctataa | gcccactcag | gcggatatga | agagaagcac | 180 |
| cgcgggaagg | aaaagcagtg | gccaaagctc | gcagttgaga | caagaaagtg | aaggaagccc | 240 |
| gccctgccac | ataagcagaa | gctttataag | cgcaggtttg | ggagacgaag | gtcaagtggt | 300 |
| cgcgatatac | gaagatgatg | ttccgagtac | attggatttg | gtacgaccat | gccctcctga | 360 |
| tttccagctg | ggaaattggc | gagtgganga | acgccccanc | atttacgcaa | cgagcataat | 420 |
| gtaaaccttt | acggttttaa | aagctctata | gttgggccta | cgctttagaa | gttttccttt | 480 |
| tgttaaggct | ttgtgtcttt | tgtttttgaa | ttataataca | aggatctttc | ttcatc | 536 |
| <210> <211> <212> <213> | 5346 463 DNA Glycine max | , | | | | |
| (213) | Grycine max | • | | | | |
| | 5346 | ` | | | | |
| <400> | | | ctaaaacccc | tcaatttagt | ggattttcaa | 60 |
| <400> | 5346 | atctaggcat | | | | 60 120 |
| <400> tcagaccaaa ggtttgagaa | 5346 gcaactcaaa | atctaggcat gaatggggta | aatttagagt | aaactctcac | ctcacacaag | |
| <400> tcagaccaaa ggtttgagaa tctataacat | 5346 gcaactcaaa gtgaaaatga | atctaggcat gaatggggta tttctcaaac | aatttagagt tgattttacg | aaactctcac cctcaaattc | ctcacacaag | 120 |
| <400> tcagaccaaa ggtttgagaa tctataacat aaatttgact | 5346 gcaactcaaa gtgaaaatga caatctaaac | atctaggcat gaatggggta tttctcaaac caattttacc | aatttagagt tgattttacg ctaggaatgg | aaactctcac cctcaaattc ctcttgcctt | ctcacacaag ccccgaatca cactttggtc | 120 180 |
| <400> tcagaccaaa ggtttgagaa tctataacat aaatttgact atttgttttt | 5346 gcaactcaaa gtgaaaatga caatctaaac cctcaacacc | atctaggcat gaatggggta tttctcaaac caattttacc cagtccaagc | aatttagagt tgattttacg ctaggaatgg tttctcataa | aaactctcac cctcaaattc ctcttgcctt gtcctaaatg | ctcacacaag ccccgaatca cactttggtc acatttcaaa | 120 180 240 |
| <400> tcagaccaaa ggtttgagaa tctataacat aaatttgact atttgtttt ctaggattta | 5346 gcaactcaaa gtgaaaatga caatctaaac cctcaacacc ctctcttgca | atctaggcat gaatggggta tttctcaaac caattttacc cagtccaagc cctccattta | aatttagagt tgattttacg ctaggaatgg tttctcataa ccactgaatc | aaactctcac cctcaaattc ctcttgcctt gtcctaaatg ccgttttagc | ctcacacaag ccccgaatca cactttggtc acatttcaaa cttccaactc | 120 180 240 300 |
| <400> tcagaccaaa ggtttgagaa tctataacat aaatttgact atttgtttt ctaggattta tcaaagcctc | 5346 gcaactcaaa gtgaaaatga caatctaaac cctcaacacc ctctcttgca ctcactttaa | atctaggcat gaatggggta tttctcaaac caattttacc cagtccaagc cctccattta tactcataac | aatttagagt tgattttacg ctaggaatgg tttctcataa ccactgaatc actacattct | aaactctcac cctcaaattc ctcttgcctt gtcctaaatg ccgttttagc cactttctaa | ctcacacaag ccccgaatca cactttggtc acatttcaaa cttccaactc | 120 180 240 300 360 |
| <400> tcagaccaaa ggtttgagaa tctataacat aaatttgact atttgtttt ctaggattta tcaaagcctc | 5346 gcaactcaaa gtgaaaatga caatctaaac cctcaacacc ctctcttgca ctcactttaa actctttttc | atctaggcat gaatggggta tttctcaaac caattttacc cagtccaagc cctccattta tactcataac caatattcca | aatttagagt tgattttacg ctaggaatgg tttctcataa ccactgaatc actacattct | aaactctcac cctcaaattc ctcttgcctt gtcctaaatg ccgttttagc cactttctaa | ctcacacaag ccccgaatca cactttggtc acatttcaaa cttccaactc | 120 180 240 300 360 420 |

| <400> | 5347 | | | | | |
|--|--|--|--|--|--|--|
| agcttattac | tatgccaagg | aggaaaagct | tcttgtctat | gattatctct | ccaatggaag | 60 |
| cttgcatgct | cttcttcacg | gttagttaat | taatcactct | tcttaattac | tctcttaggt | 120 |
| accttttgac | agaggaaaaa | gaaatggaat | tgagaacaaa | tatttaaatt | aaaatggtat | 180 |
| atgaaagtat | gaaactctac | cgaattttan | gaaatttcta | ctcatttctc | tttctttcct | 240 |
| cacaaatcaa | acggaccctt | agtccgtgtt | tagattcatg | ttaaatgatt | taaaattatț | 300 |
| atgttaaact | accaacttac | gttaaacgtt | tatttggata | tgtatgttga | aacaaacatt | 360 |
| ctgcattctg | tgttttgaaa | caaaaattgt | gcatttggac | acaagaataa | ataagtgact | 420 |
| tttgcattga | atagaanaac | aaacattgga | ttntgcttac | ctttttttt | tattattaat | 480 |
| cgaacctaac | atatatttaa | aggattttgc | gtaccctaaa | atcactctta | anacctaaat | 540 |
| aaagtcattc | aaaatcaact | ctgatgttga | aaca | | ÷ | 574 |
| <210> <211> <212> <213> | 5348 464 DNA Glycine max | × | | | · | |
| | | | | | | |
| <400> | 5348 | | | | | |
| | 5348 tgcacttgca | cgtcaaccca | acctgaccgg | agctatgtag | ttggaagaaa | 60 |
| aaggcgaaaa | | | | | | 60 120 |
| aaggcgaaaa tcaatggtgg | tgcacttgca | aatggagacg | aagaggaaga | cctaatgaca | gagcatacac | |
| aaggcgaaaa tcaatggtgg caatgaagta | tgcacttgca agtctgcaca | aatggagacg tgggactccc | aagaggaaga tcgtggagta | cctaatgaca | gagcatacac gaagagaaaa | 120 |
| aaggcgaaaa tcaatggtgg caatgaagta gatataatat | tgcacttgca agtctgcaca caagaacggg | aatggagacg tgggactccc gtttgagaat | aagaggaaga tcgtggagta gtttaaaaat | cctaatgaca gcatgctgag tgagaggtgt | gagcatacac gaagagaaaa atgattcaca | 120 180 |
| aaggcgaaaa tcaatggtgg caatgaagta gatataatat tgttttgccc | tgcacttgca agtctgcaca caagaacggg gaagtgggta | aatggagacg tgggactccc gtttgagaat tcaggtttct | aagaggaaga tcgtggagta gtttaaaaat actttatgac | cctaatgaca gcatgctgag tgagaggtgt atctccccat | gagcatacac gaagagaaaa atgattcaca tatattacaa | 120 180 240 |
| aaggcgaaaa tcaatggtgg caatgaagta gatataatat tgttttgccc gtcattgctt | tgcacttgca agtctgcaca caagaacggg gaagtgggta agggttttat | aatggagacg tgggactccc gtttgagaat tcaggtttct tcatgttgtt | aagaggaaga tcgtggagta gtttaaaaat actttatgac ttctacagtt | cctaatgaca gcatgctgag tgagaggtgt atctcccat tgatcttctt | gagcatacac gaagagaaaa atgattcaca tatattacaa gtctaatgtc | 120 180 240 300 |
| aaggcgaaaa tcaatggtgg caatgaagta gatataatat tgttttgccc gtcattgctt cattatgaaa | tgcacttgca agtctgcaca caagaacggg gaagtgggta agggttttat tctacacatc | aatggagacg tgggactccc gtttgagaat tcaggtttct tcatgttgtt cattttggaa | aagaggaaga tcgtggagta gtttaaaaat actttatgac ttctacagtt tgcactctct | cctaatgaca gcatgctgag tgagaggtgt atctcccat tgatcttctt tttttcttcc | gagcatacac gaagagaaaa atgattcaca tatattacaa gtctaatgtc | 120 180 240 300 360 |
| aaggcgaaaa tcaatggtgg caatgaagta gatataatat tgttttgccc gtcattgctt cattatgaaa | tgcacttgca agtctgcaca caagaacggg gaagtgggta agggtttat tctacacatc tgtgaagtta ttccgaaaag 5349 551 DNA Glycine max | aatggagacg tgggactccc gtttgagaat tcaggtttct tcatgttgtt cattttggaa agtgcacgaa | aagaggaaga tcgtggagta gtttaaaaat actttatgac ttctacagtt tgcactctct gcaaaatggg | cctaatgaca gcatgctgag tgagaggtgt atctcccat tgatcttctt tttttcttcc | gagcatacac gaagagaaaa atgattcaca tatattacaa gtctaatgtc | 120 180 240 300 360 420 |

| agcttcacaa | tatgatattt | actngttgac | gcatatacat | cgtattttc | tttgattggc | 60 |
|------------|-----------------------------------|------------|------------|------------|------------|-----|
| aggaagacac | ttaatgagct | tggagctatt | gtctccacgg | tgcatccaaa | gatgaaattc | 120 |
| cccaccctga | gggggagatt | atgactatca | aggtagatga | aaagcaagca | caatagtgct | 180 |
| acgcacaaag | cctaaagatg | gcaccttatc | ctcccaccag | ggagcttgct | aagcctcacc | 240 |
| ccacaatggt | tgaaggtact | ccaagtcatg | agcatgaagg | aaagacctct | aatctgagcc | 300 |
| ctaaccatat | accaagccat | cttagatgat | gaattcgata | tagatccatg | caacaacact | 360 |
| tctaacaaag | gcccaaagcc | cattgaagag | ctcgtcaagc | tgcagttggg | actcaaaccc | 420 |
| gggcaatgta | catagctcaa | gccatgagca | cagatgcatc | gctgataccc | tacatcagaa | 480 |
| tgtggaccta | ttcgcttggc | agccatttgg | tatgtcggga | atccaccccc | acatcatctg | 540 |
| ccacaagctc | a | | | | | 551 |
| | 5350 552 DNA Glycine max | ς | | | | |
| <400> | 5350 | | | | | |
| tcatgatgat | gattcaagta | tgaatcaagt | agttttgatg | atgaaaaaaa | gcccaaaaga | 60 |
| atgatttcaa | gattcagtca | acaagttcaa | gatcaagatt | aatttcatgt | ttcatgagaa | 120 |
| gaaatcaaga | agattcaagt | ttcaagagaa | gtttgatttc | aagattcaag | agaaggtgaa | 180 |

| tcatgatgat | gattcaagta | tgaatcaagt | agttttgatg | atgaaaaaaa | gcccaaaaga | 60 |
|------------|------------|------------|------------|------------|------------|-----|
| atgatttcaa | gattcagtca | acaagttcaa | gatcaagatt | aatttcatgt | ttcatgagaa | 120 |
| gaaatcaaga | agattcaagt | ttcaagagaa | gtttgatttc | aagattcaag | agaaggtgaa | 180 |
| ttcaagattc | aagagaagaa | atcaagaaga | cttcacaagg | gaagtattga | aaagatgttt | 240 |
| caagaaacaa | acatagcaca | attttgtttt | tcaaaagagt | ttttctcaaa | attttctaag | 300 |
| ttaccagagt | gtttactctc | tggtaatcga | ttaccagttt | cctgtaattg | attaccagtg | 360 |
| acaaagtttg | atttgaaaag | cttttaactg | aatttgcaac | gttccaattg | atttttaaat | 420 |
| ggtgtgatcg | attacaatat | attggtaatc | aattaccagt | gtatcattga | aattcaaatt | 480 |
| atattgtgaa | gagtcacatc | ttttcataaa | atgctttgtg | taatcgatta | catggttatg | 540 |
| gtaatcgatt | at | | | | | 552 |

<210> 5351 <211> 365 <212> DNA <213> Glycine max

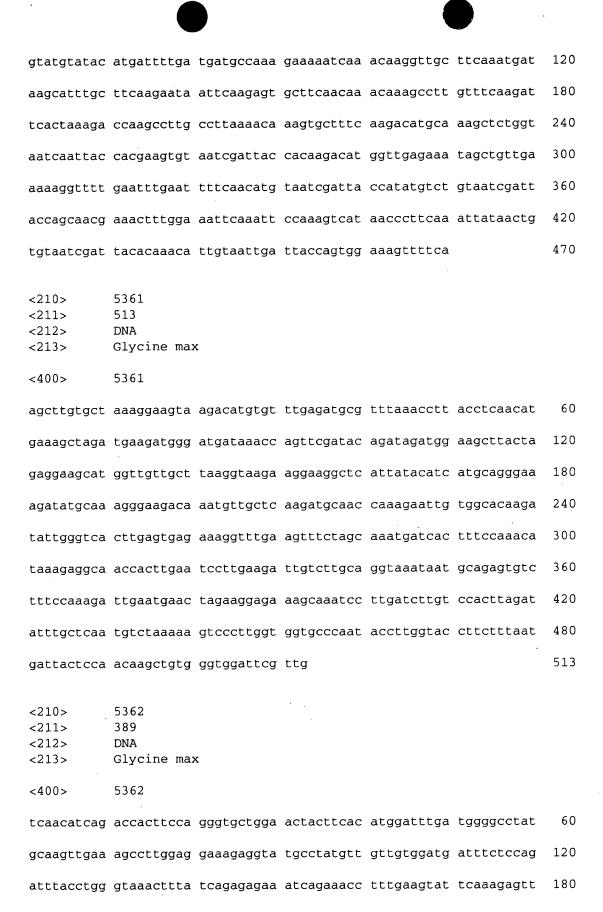
| <400> | 5351 | | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|--|
| gtatgggttg | gatgttgaat | tccacgtgat | cctggtgccg | aaatgatggg | acagcgggtg | 60 | |
| aaccaaacgc | ggaaggtttt | tttggtgagg | tagccatgġa | aaagcagagc | gtttggaatg | 120 | |
| atttcgtaaa | tctcacaatg | ctattgggaa | atgctggtaa | aaacacgaat | gccaagcaga | 180 | |
| tataaatttg | aatgaagaat | gtataggggc | gtgtgaggca | acggtcgaat | tcgttttggc | 240 | |
| ttaatattga | acgtgctatt | aatgttaagt | gattcgtttg | ggcacgttca | gattgctgta | 300 | |
| gctgctataa | ttcctctagc | aaacaaatgc | ccagcttgcc | cctcagtttt | tcaaactgat | 360 | |
| ttgca | | | | | | 365 | |
| <210> <211> <212> <213> | 5352 447 DNA Glycine max | ς | | | | | |
| <223> <400> | unsure at a 5352 | all n locati | ions | | | | |
| ntgcggatat | ggtcttcgcc | ggcgaaatga | tcgaagtggg | tctaaaaaga | ggaaaatctg | 60 | |
| atcatcttgc | tttgataaat | gcaaaaaaaa | aaaaaaaaa | aaactggggc | aagtgaagag | 120 | |
| gatgataagg | agggagaaac | ctatgctgtg | actgccattc | ttatacgacc | aagtttccca | 180 | |
| ccaacccaac | aatgtcatta | ctcagccaat | aacaaccctt | gtcattaccc | accacccagt | 240 | |
| catccacaaa | ggccatccct | aaaatcaacc | acaaagccta | cctaccgcac | ttccaatgac | 300 | |
| aaacaccacc | tttagcataa | accaaaacac | caaccaagaa | atgaattttg | cagcgagaaa | 360 | |
| gccagtagaa | ttcaccccaa | ttccagtgtc | ctatgctgac | ttgctcccat | atctacttga | 420 | |
| taattcaatg | gtagccataa | ccctaac | | | | 447 | |
| <210> <211> <212> <213> | 5353 501 DNA Glycine max | · · | | | | | |
| <400> | 5353 | | | | | | |
| agcttctagt | atacgattta | tctgaagaaa | ttcattttct | atcgcacaac | ttccaccacc | 60 | |
| accaagagca | gctaagtact | gcaatgcaat | tttagctgtt | tctgttttcc | cagatccact | 120 | |

| ctcgccactg | cgaacaaatt | tctaacaatg | attattaaca | agcacaccag | tgaatgtatc | 180 |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttattactac | tatgaaaatc | caatgatatt | ggtttaggaa | catatattaa | gtgtcatgca | 240 |
| caaaatgtag | cccataaatg | cagtaaggag | ctgaccttat | gataatggac | tgatttactt | 300 |
| catctgtaag | atacaaaaag | aaaaagaaaa | cctttataaa | tgtctcattc | aagtagaatg | 360 |
| caaagattgc | aaagaaggga | agagaaaggg | agaatttcat | tcacctctta | tcaccttgtt | 420 |
| ataaagccga | tctgccacag | cataaacatg | aggactatca | ataattctct | gcctataagc | 480 |
| tgagacagaa | tcatttccat | a | | | | 501 |
| <211> <212> | 5354 496 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tgcataactt | tgaatggggt | attggtagag | tttatacgtg | taaagccatt | taatgccata | 60 |
| actaaggaat | aaattttta | gagtataata | atgattacaa | ttactattgt | agttgtggtt | 120 |
| gtaacttatg | agtaatcaac | catttcagca | tgatgtctct | gtttttcaaa | tgccttgatt | 180 |
| gggaattggt | tgaggattga | ctttggcata | attggttgtt | tgtgtgagga | gtgattttaa | 240 |
| ggaaatagta | ctttctagca | acaatggaag | catcaccttt | ttattangtg | cttgataagt | 300 |
| tgatttttga | aagttctaat | tgtgctaaac | atttgtgata | tctagtaatc | cctttagaca | 360 |
| ttcatggtgg | tcagttggta | ttggacatat | cagatgtatt | cattctacag | acttgtttta | 420 |
| tttgcttgat | tttgtgaaag | tgcccatata | ggtaaaaaat | gctataatgt | ttcaacaggc | 480 |
| actataattg | acagta | | | | | 496 |
| <210> <211> <212> <213> <400> | 5355 406 DNA Glycine max | x | | | · | |
| agcttggagt | gagagaaaag | agaaagcttg | gctgagaatg | cgtaaaaaca | gagaaaagag | 60 |
| gcgcataata | tagcaaggga | gtaaaaacct | tagattttag | gtggattcta | ggtttttgag | 120 |

tgatttttaa gatcctagag gtggaggaga catccccact actttgtatc tgtcaattgc 180

| tctcaaatcc | ctcttcctga | ttgtaaaaag | cgcttccttg | tgatggaaag | ctaaacccat | 240 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| atgttgagga | attctgctga | gtatttgatg | taaactctta | tcctatctat | ttaaagttgt | 300 |
| tttatgtgtt | cattgtttct | atttgtgctt | tattatcgca | tgcttgtggc | ttgatcactc | 360 |
| atttgtatgt | gctgctagga | gctttagcat | tggaaaatgt | actgca | | 406 |
| <210> <211> <212> <213> | 5356 435 DNA Glycine max | × | | | | |
| <400> | 5356 | | | | | |
| tgcttctaca | attgacatat | actttgacaa | tgttggggga | gacatacttg | aggcagccct | 60 |
| tcttaacatg | agaaggcatg | gacgaattgc | agtggccaga | atgatctcac | agtaagatct | 120 |
| tgatgagcct | caaggcataa | agaacttagt | gaatatcata | tacaagcaga | tcaaagtaga | 180 |
| agccttcaca | gtttatgatt | actatcacct | ctatcctaaa | ttcttggata | ctgttttgcc | 240 |
| ttacattagg | gaagggaaga | taacatatgt | tgaagacata | actgagggtc | ttgagaacgg | 300 |
| tccaattgca | ctagaagcaa | tgttccaagg | tcgtagtgct | ggtaaacaag | tcattatact | 360 |
| tgctcgtgaa | taatttagta | caaccttact | gtttgatctt | tcaattcatt | ttgggtgtgt | 420 |
| tgtaactctc | atttg | | | | | 435 |
| <210> <211> <212> <213> | 5357 332 DNA Glycine ma: | x | | | | |
| <400> | 5357 | | | | | |
| agettageta | cacacacacc | cctctaataa | ctaagctcac | ctccttgaga | agcttccttg | 60 |
| agaagattcc | taaagaatca | agagcttagc | tacacacccc | ctataatagc | taagctcacc | 120 |
| cccatgaaaa | aatacatgaa | aatacaaaaa | atttcctact | acaaagacta | ctcaaaatgc | 180 |
| ctcgaaatac | aaggctaaaa | ccctataata | ctataatggc | caaaagacaa | ggcccaaccg | 240 |
| gaggaaaaac | cttttttaat | attaacaaag | ataagcgggc | tcatacttag | cccatgggct | 300 |
| cgaaatcgac | cctgaggctc | atgagaaccc | ta | | | 332 |

| <210> <211> <212> <213> | 5358 369 DNA Glycine max | | | | | |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <223> <400> | unsure at a 5358 | ll n locati | ons | · | | |
| tgtttgaagg | atagattctc | attatacaaa | gcttgcatga | actagctcag | caaaggccaa | 60 |
| ttatgagcgt | agagcagttc | attgagaagg | ttgcctggcc | tgnggctcga | ccttctttta | 120 |
| tggggcataa | tgaaagtttt | acagcccaga | cacctcaaca | gcatgagcca | caaccagaaa | 180 |
| atgatcactc | atctgaagcc | atcatctctg | gagctgttga | ttgtaaaaaa | agaagattag | 240 |
| agacgagatc | caatgaggct | gctcatcatg | aaccaatgcc | agcgtcagtt | gatgcaccat | 300 |
| ttccaggagt | ggattcatct | ccacctcagc | atgtagtaga | ctcttccatt | cctgtcttag | 360 |
| agatacatg | | | | | | 369 |
| <210> <211> | 5359 391 | | | | | |
| <211> <212> <213> | DNA Glycine max | : | | | | |
| <400> | 5359 | | | | | |
| agctttcact | cggaggtccg | attcaggcgc | ataatatatc | gagacgctcg | aaattgaaca | 60 |
| atggaagctc | ttgagcaatt | caaatggtca | taacttttca | ctctgaggtc | ggattcaggc | 120 |
| gcattgtata | ttgagaagct | cgaaattgaa | caatggaacc | tcttgagcaa | tttaaatggt | 180 |
| cataactttt | cactaggagg | tccgattcag | gcgcataata | tatcgagacg | ctcgaaattg | 240 |
| aacaatggaa | cctcttgagc | aatttaaatg | gtcataactt | ttcactcgga | ggtccgatcc | 300 |
| aggcgcataa | tatatcgaga | cactcgaaat | tgacaatgga | agctcttgac | aattcaaatg | 360 |
| tcataacttt | tcactctgag | gtccgattta | g | | | 391 |
| <210> <211> <212> <213> | 5360 470 DNA Glycine max | | | | | |
| <400> | 5360 | | | | | |
| ctgatggtgt | cgagaagaaa | tcacatgttt | ggcatcatca | aaaaggggga | gaatgtgaat | 60 |



| gagtctaaga | cttcaaagag | agaaagactg | tgtcatcaag | agaatcagga | gtgaccatgg | 240 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cagagaattt | gaaaacagca | ggttcactga | attctgcaca | tctgaaggca | tcactcatga | 300 |
| gttctctgca | gccattacac | cacaacagaa | tgggatagtt | gagaggaaaa | acaggacctt | 360 |
| gcaagaggct | gctcgggtca | tgcttcatg | | | | 389 |
| <210> <211> <212> <213> | 5363 533 DNA Glycine max | | | | | |
| <400> | 5363 | | | | | |
| aacccgctga | gtttttttgt | ttcacccaaa | ctctatgagg | agggccagaa | actactgtgt | 60 |
| aagattttct | ttttttcctt | gttagtgttc | ttgatttgtg | aatctcactt | aaattttgag | 120 |
| cttaatatgt | ggcatgcatt | gtgaatcaca | tttttaatct | ttatcagcta | agttgagttg | 180 |
| tttatgtatg | ttgtaaggcc | tttcaaggag | aaacgaagca | atgagcttaa | attctaatag | 240 |
| ctcaaaatca | catataattt | tcacatttgt | cattgagtct | ttgtgtaagg | tactgtcaaa | 300 |
| ttttgtaatt | ctacctaaca | ttaccagcag | ttgtgtatgg | aaattgttgt | tttcctaaga | 360 |
| ttcaagccac | ggttatattt | tctctgttag | ttctattgct | aaacatgatt | tttttaaact | 420 |
| gatgttgcac | ggaacccaca | aagggtttca | atatctcaaa | cactagcaga | atcaccctta | 480 |
| ttgatcctgc | tggattggat | aacgatgaaa | ttgatgatgg | agagccaatg | tct | 533 |
| <210> <211> <212> <213> | 5364 525 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5364 | all n locat: | ions | | | |
| tgtggtggtc | attctctacg | ccattttcat | cgctgccgca | tgtaaaatga | cggtcaaggc | 60 |
| tcttaagaca | gcaatgtaaa | gatgtagggt | atgataatag | caaggcaaat | tgaaatagaa | 120 |
| tatgtatatt | gttatttcat | tgatcctttg | catgatatat | ataatacatg | tacaagaatg | 180 |
| ttctatacca | attctaaggc | atgacagacg | tgatccataa | tcagtggcat | ctgatttatt | 240 |
| ctatgcatta | taaggtaaat | aaatatagaa | tcaaggtaac | atangaaagt | aaatatatac | 300 |
| acagcatatt | tgcaatcatg | tagaagatat | ttcctaatac | tcccctcaa | gttggtgagt | 360 |

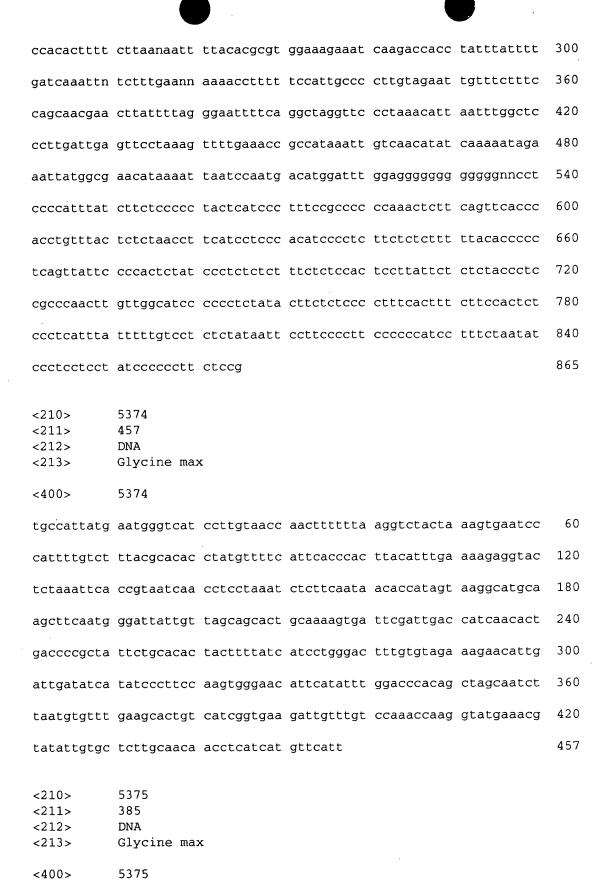
| gaatatcgtg | aagtcccaac | ttgttgcgca | atgtcacaaa | ttgatctttt | tccaaagctt | 420 | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|--|--|
| ttgtaaacac | atctgctagc | tagaattttg | ttggcacata | agaaaagatt | gatcatccca | 480 | | |
| gcttgtagtt | ttttcccgac | tatatgacaa | tcatttccat | atgtt | | 525 | | |
| <210> <211> <212> <213> | 5365 584 DNA Glycine max | | | | | | | |
| <400> | 5365 | 365 | | | | | | |
| agcttgaggg | gctacaaaat | cgtgcctcac | cgtgaactcc | ttcattttga | atgaggcgat | 60 | | |
| gaagttttgg | gtgaagaaaa | ctcaccctcc | ccctctttta | acctatctcg | tgcagagggt | 120 | | |
| gctcgcccag | gcgagctagc | tatgcatttc | ttttttgcaa | gacttctctg | aaaaatttta | 180 | | |
| actattctac | gggcttgcgc | ttgtttattt | taaatcccaa | gattaagaat | aaactagaca | 240 | | |
| tattcaacta | tgactttaga | caaatggaca | aacaagcaga | aacttaaaag | atactaggca | 300 | | |
| gcctcctagt | agtgcttctt | taacatcttg | agccggacgc | aggataatga | tttattgatc | 360 | | |
| atgggcctag | catctgctcg | tacccgtccc | taagtcttct | aaaaacagga | aatggaacca | 420 | | |
| cgcagtaaaa | catgactacg | ctaccactta | ccttggttta | tcttttcctt | gaattccgcg | 480 | | |
| ttgtattgac | catcattcga | aacaaatctt | ctcttgtcgt | tcgatgcata | ggatgataaa | 540 | | |
| tatgcatatg | catgcatgct | catgatcagg | cagttcaagt | gtaa | | 584 | | |
| <210> <211> <212> <213> | 5366 553 DNA Glycine ma: | x | | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | | | |
| aaataatttt | tttaatttcc | atgatatagg | gtgttttgcc | ttttcttctt | tatcttttt | 60 | | |
| attttcattt | ttgtctccct | aaaaaaataa | tttgattcta | atcttgttat | tagttttgtt | 120 | | |
| cgtgaaatct | aatagaaaaa | attacaagga | ccacaataga | aataaaaaaa | attataagaa | 180 | | |
| caaaaaatta | agtgaagaac | caaaatgaaa | aaaccttata | tatatatata | tatatatata | 240 | | |
| tatatatata | tatattaaga | ataacaacct | aaacaactat | tttgggtaaa | aaaaattatg | 300 | | |

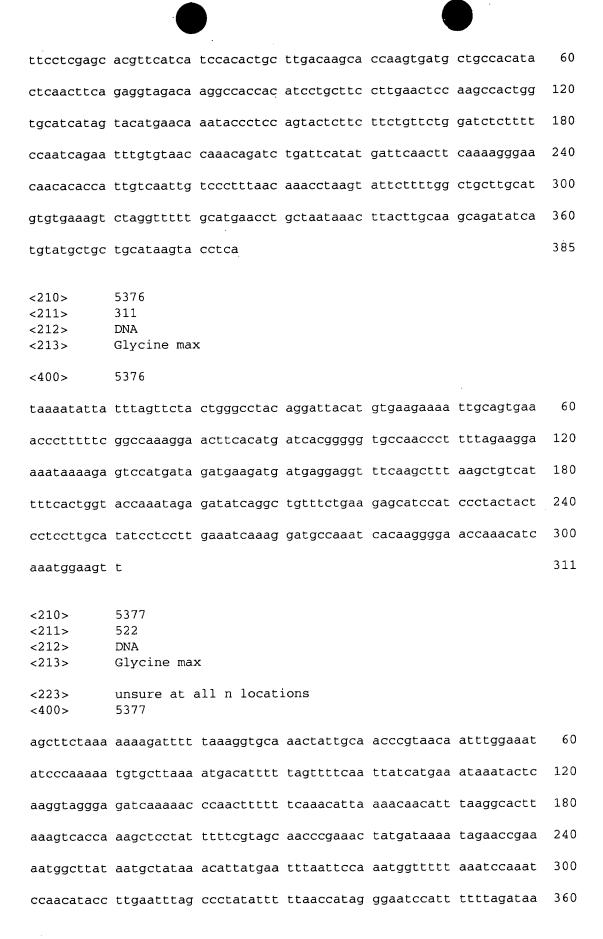
| tttaaattgt | gaatcttgag | gcaaaaaaat | taatcaattc | atttttttt | tggaaatttt | 360 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| agattntgaa | tagagaagat | ataaaaatat | atatatttac | ttaattgtta | aataacaaga | 420 |
| tataattaac | ttaataaaaa | gtttgagact | taattgcaat | tttagtccct | taaatattga | 480 |
| gattatacaa | attatggctc | cttaagtttc | aattatgcga | attaaanctt | ctaactttat | 540 |
| ttttatttac | aat | | | | | 553 |
| <210> <211> <212> <213> | 5367 478 DNA Glycine max | ĸ | | | | |
| <400> | 5367 | | | | | |
| agcttctttt | ggaccttgaa | cagacaacta | actcctcttt | caaaaccatg | ctatgtgctc | 60 |
| gcgactggtc | cctctcttcc | cttcgcagct | tgagttcatt | gttgctaccc | cacagagete | 120 |
| cgcgaaattt | gttccggcca | tactcttcct | tgcaagctct | cttggcctct | tgttcaaggg | 180 |
| ctctcgcggt | agttgcattc | tcttcccgta | atccggcaca | ctccttccgg | atgtgtgtag | 240 |
| cggccaactt | gaacttctcc | ttggcaagtt | tcgcctttcc | taactcgctt | ttgagagctt | 300 |
| ggacttcttc | gtcctcttcc | ggtgcttcaa | aactctcttc | gctgacgact | tttaacttgg | 360 |
| cgagccaatc | taaacctcgt | acatgaactt | tcagccattc | atggtaacca | ccaatgatgc | 420 |
| cattacgaat | gcccctaagt | tcttgatctt | tccttaacgg | ggtttcccat | gccttatg | 478 |
| <210> <211> <212> <213> | 5368 476 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| aagttgatgc | taagaccctc | aatgcattct | tggagacccc | ggtggttctg | gagccaggga | 60 |
| agcgatactc | agcctactct | aggttctgcc | gcatgcaccc | aaaccttcaa | gagctcgccg | 120 |
| ccagaatatg | tatcccaagg | cacagttttg | ttctgaatgc | tgaaagagcg | cccttgaagc | 180 |
| tcctaaggaa | ggatctcact | acattggcgc | agacctggag | catcttgtnc | tactccaacc | 240 |
| tcgccccac | ctctcatacg | tctgctctta | atatggacag | ggcgaggtta | gtgtatggat | 300 |
| tggtgatgaa | gatggacatg | aacttgggct | ccatcatctc | aggccagatt | tctcagatga | 360 |

| cccattccaa | ctcctccagg | cttgacttcc | ctgcactgat | taccgcctta | tgcatcgaca | 420 | |
|-------------------------|-----------------------------------|-----------------------------------|------------|------------|------------|-----|--|
| gaggagtagt | cccagattca | ttgactttcg | agtccctgag | ccctactatt | aatttg | 476 | |
| <210> <211> <212> <213> | 5369 550 DNA Glycine max | | | | | | |
| <223> <400> | unsure at a | unsure at all n locations 5369 | | | | | |
| agcttatatc | aaaaaattga | ggccaaaaag | gttattgaat | gaaaaacatc | aactaattag | 60 | |
| acagcaaagg | ctacattacc | aaaactggga | gcagcaggac | aaacaattgt | agaagcaaag | 120 | |
| cttcatgatg | aatcaagatt | gattcaaaga | tgttttgata | ataacaaaga | tgatgacaaa | 180 | |
| ggtgatgaca | aaaagctcaa | aggtcaatca | aagaataagt | tcaagatgtt | caagatagaa | 240 | |
| tcaagaacac | ttcaagattc | aagaggaaag | ttgaagaaca | cttcaagatt | caaggatcaa | 300 | |
| gcttccaaga | atcaagactc | aagattcaag | aatcaagaga | agacttaatc | aagataagta | 360 | |
| tgaaaaggtt | ttttcaaaaa | ctgagtagca | catggatatt | tctcacaaca | tgtntaccaa | 420 | |
| agattttta | ctctctggta | atcgattacc | agtagcaaaa | tggatttgaa | aaagttttca | 480 | |
| actgaattta | aaacgttcca | attgatttca | aaaactgtaa | tcgattacaa | tattttggta | 540 | |
| atcgattact | | | | | | 550 | |
| <210> <211> <212> <213> | 5370 624 DNA Glycine max | ĸ | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | | |
| tggtgtagag | cttgagttat | ggagccaaaa | aagacaatga | tttatacttg | taacttgtta | 60 | |
| gaattagtgg | aacttagtgg | ttggtcaaga | attagacata | gtcttggttg | ttgagacgaa | 120 | |
| ccaatatata | tttcttatgt | cttattcttt | cttctattat | ttgaactgac | ttanggttta | 180 | |
| aatttgatct | ttgcttttga | aaaactttgg | ttgttttatg | aagatttgaa | actatcgttt | 240 | |
| aatgtgtcct | acgaaaattt | gatatctggt | ttcttatatt | ttacttcatc | agatgatatc | 300 | |
| tttgttgtat | tcgaaaaagg | ttttaagttt | agtaaaaatc | aaaattcaac | ccccttgtga | 360 | |

| tatatgcctt | tacaaattct | aagtgggcga | tcttgtatat | agaatgagaa | gagaagcaag | 420 |
|-------------------------------------|--|-------------------|------------|------------|------------|------|
| gaagcatcat | gttgatggaa | aactttctct | gaactagaaa | gaacccttca | taaatactgt | 480 |
| aacacaacaa | aatggggctt | cccaccttga | acaactttat | tgaatggtat | ttttaggact | 540 |
| tgaatgcaac | acatttgaag | ccctcttcat | taaaaataag | ggggggaccc | ctttttccct | 600 |
| tcaacctttt | ttccaaataa | aaaa | | | | 624 |
| <210> <211> <212> <213> <223> <400> | 5371 861 DNA Glycine max unsure at a | κ all n locati | ions | | | |
| | gcacgcataa | cgaacgcacc | tccgcgacaa | tatgatgtat | ccannnnncn | 60 |
| | | | | nnanaagcca | | 120 |
| | | | | ccccaaggag | | 180 |
| | | | | gacaaaaaag | | 240 |
| | | | | ccaaaggccc | | 300 |
| | | | | ccccggact | | 360 |
| - | | | | ggcagacggg | | 420 |
| | | | | cccaacacaa | | 480 |
| _ | | | | cataaccgac | | 540 |
| | | | | gcgccccaaa | | 600 |
| | | | | ccgaccgaaa | | 660 |
| | | | | aggggtaaca | | 720 |
| | | | | cctccgaagg | | 780 |
| | | | | | | 840 |
| | | | gygacaacaa | tcagagaggg | cctacgacca | |
| coctaccgca | caacagacac | y | | | | 8.61 |
| <210> <211> <212> | 5372 914 DNA | | | | | |

| <213> | Glycine max | Glycine max | | | | | | |
|-------------------------|-----------------------------------|-------------|--------------|----------------|----------|--|--|--|
| <223> <400> | unsure at all n 5372 | locations | | | | | | |
| acgcacttcc | atctgattct actco | atgta tccg | tacatc aaato | gtact cccccc | ccct 60 | | | |
| cccacccccc | ggantttgtg catco | ctttcg gcct | tatata ctaac | ttggc attcata | atcc 120 | | | |
| cgatgaggat | gatccataag ttctc | aagac tgga | ctaata acatt | gctgg ccaaat | ttca 180 | | | |
| tgggctttgc | agctgaaaaa ccctc | cataag ccat | tcttaa cggag | sttccc atattg | ttct 240 | | | |
| tgttccaccc | ttgaagaccc ccttg | gatggt ccac | ggaaga agaat | aatat tttcta | acaa 300 | | | |
| gcctttatac | tcaatttctc tggaa | ıcggag atgg | caaaaa caatg | ggttg gtacta | cccc 360 | | | |
| tgtacaatcc | aagcttcctt gatga | actaa cgaa | tgattt cacag | satgtt ttcgate | gata 420 | | | |
| acacaacggg | attaacaaaa agcct | ccaaa ggca | atttct tgata | attca agaaag | agtc 480 | | | |
| cccaatgtta | aaaaagctcc tgatt | gaatt aaga | atcaag aatca | aggtc cagcct | tccc 540 | | | |
| gattcatgat | ccataattct gaact | ctgaa tttt | agaatc aaaga | agaac ttttct | gata 600 | | | |
| ctatcaaaag | gatttttcca aattg | gattac ccca | tggttt ctttc | ctaaac ttttt: | tccc 660 | | | |
| aaaaattttt | ttctcctgct atcca | itttcc ccat | ttatgt tttt | ctttc ccaatt | ttca 720 | | | |
| aaaatgtttc | taaaaccctt cttac | ecgeta taac | acccct tccat | atgta ttacaa | aaag 780 | | | |
| tgttatgtaa | ttaccacatt tggto | ggaaac aatc | ecctgc gcttg | sccacc tcttac | ctta 840 | | | |
| tctttacaag | gtcaagaaca tatco | cttttc ataa | aaacct cttca | itacgt atcacc | gcaa 900 | | | |
| tttcactgaa | tccg | | | | 914 | | | |
| <210> <211> <212> <213> | 5373 865 DNA Glycine max | | | | | | | |
| <223> <400> | unsure at all n 5373 | locations | | | | | | |
| ntgatttcat | gcagtcccgg gccno | cttaga gtcg | accccc cgcct | gccag ctttgg | gtgt 60 | | | |
| tgaagcttaa | tggaggcttg ggggd | cacta ttgg | ttggac tggco | ccaaa gtattg | ctga 120 | | | |
| aatcctaatt | tttttatatt taatt | tttaa cctt | aaagac tctgg | gatga attgga | gaac 180 | | | |
| ttttccgtct | tggggtggtg aaatt | ctttg cttt | ggatgg cttaa | acttg gaaaag | aaat 240 | | | |





| aaaatactaa | attntgtacc | aaacactgtc | agtacgtcga | agtagagcca | aacttactta | 420 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| aaatgcttca | aaacattaag | aatttgtttc | ccaatgattc | ccanatccaa | attaaataaa | 480 |
| ttatacatgt | aacataattc | tatattttga | ccccaatgaa | tc | | 522 |
| <210> <211> <212> <213> | 5378 477 DNA Glycine max | ς | | | | |
| <400> | 5378 | | | | | |
| tattttgatg | attgctttga | aacaatttta | aaggtatgtc | aattgagtat | gggaagaaaa | 60 |
| tgggctgcaa | ataggcaaag | cttatggaat | gaattcaacg | atccaaccaa | aacaagagat | 120 |
| gaaatcataa | aaaaatgtgt | ggataggcat | agataaagat | caatgggctc | gttttgttaa | 180 |
| ttatagtcgt | aaaccatcaa | cattggtaca | attagactgt | tttaattatt | gaattgtttt | 240 |
| tatagctcat | tatatgatta | ctattacaag | ttgtaaactt | gaaattgctt | tgcatatagg | 300 |
| aactttgtaa | gagaaataaa | gaaatttgaa | gcaagcaagt | tattccacac | actggtggat | 360 |
| ccaaagctaa | tcctataaga | agaaatgagt | tggtgatgac | actaaatgtt | aactttacta | 420 |
| attaaagagg | ttcaaagttt | acttactctt | tatttatttt | accctgttaa | aaaatgg | 477 |
| <210> <211> <212> <213> | 5379 505 DNA Glycine max | ς. | | | | |
| <400> | 5379 | | | | | |
| agcttcccgt | atccgtactt | ggaaggatct | gattaccgcc | ttcctaaggc | agtatcagta | 60 |
| caattctgat | atggctccgg | accgtactca | actgcaaaat | atgttcaaaa | aagagggtga | 120 |
| aacctttaaa | gaatatgcgc | accgatggag | ggatttggcg | gcacaagtag | ctcctcccat | 180 |
| ggttgagaga | gagatgatca | ccatgatggt | agacactctg | ccagtgttct | actatgaaaa | 240 |
| gctagtgggt | tacatgccgt | ccagctttgc | ggatctggtg | tttgccgġgg | aaagaatcga | 300 |
| cgtgggattg | aagagaggaa | agtttgattc | gtttcctcca | caaacgtgaa | cgccaagaga | 360 |
| atcggggcaa | cacgggcgaa | aacgaaggaa | agagatgccc | atgccgtctc | tttaacaccc | 420 |
| acataaataa | aacccctca | aacacctcat | ggtgccatc | aatacgcgcc | aaatcaccca | 480 |

| acctttttgg | ttatgttgga | atgcc | | | | 505 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5380 379 DNA Glycine max | ς | | | | |
| <400> | 5380 | | | | | |
| gacactatga | aactaagctt | gataaattac | tcggaagtgg | taactacatt | ttttaagctg | 60 |
| aaagttctac | tgaattttgt | agacatttgg | accaaaatta | taaaaaaaga | accaagcgat | 120 |
| ttggattaaa | gaaaaaaatt | agaaaaatca | cacaagttgg | atgaaaaatc | agtgtccagc | 180 |
| aaaataaaag | tgaaaaggaa | gtgtgcttgt | tgttttagct | caaaattgtt | tctataatag | 240 |
| gtgcctactt | tataccactc | ctagttctga | aacttcaatt | gaaaataatt | atgaaaacac | 300 |
| gtgccaaaaa | tagaggtttc | ttgagtcttt | ttttcgattt | tcttttttag | attttctact | 360 |
| ctactctata | gcctttata | | | | | 379 |
| <210> <211> <212> <213> | 5381 427 DNA Glycine max | × | | | | |
| <400> | 5381 | | | | | |
| agcttgctag | cggatttttg | catttccaat | tcatggtaga | aatccagcag | ttaaaaggct | 60 |
| atttttccat | cttccaagtc | aacaaccaat | ctacttcaat | gatgatgcaa | atgttcaaga | 120 |
| tctgctctct | aaaccaagtg | tcagtcaatt | atgtttactt | catggatgga | agcaaacaaa | 180 |
| gtttaccttg | aggctagtga | tctcacttat | agccaattcg | taactagatt | tttttatgtg | 240 |
| aaaaaaagt | tgttggacat | gtgtcgcaac | cttcccttcg | gagggagggc | gacccgtgac | 300 |
| tcgctggtgc | atcttcccag | aaaggaatat | gcgcggagtc | cccaccaacg | tttatttgag | 360 |
| gaaaacctca | gaaaaaccaa | aaaagacgtg | gtctaacaac | tttaagtgaa | aagttccggg | 420 |
| agttgtt | | | | | | 427 |
| <210><211><212><213> | 5382 376 DNA | v | | | | |

| <400> | 5382 | | | | | |
|---------------------------------|---|------------|------------|------------|------------|-----|
| ttgcatcaga | caaagatgat | agcaaatcca | ttttaggata | tgtttacact | ttaaatggtg | 60 |
| gtgcaataag | ttggaaaagt | tccaagcaag | ctatggtagc | agattcaact | actgaagcag | 120 |
| aatatatagc | gacaagtgaa | cccgctaaag | aagctgatag | gataaaaatg | ttcatagttg | 180 |
| aacttggtgt | ggttacttca | atagaagaga | cgggcccatt | aacgtgcgac | aataatgggg | 240 |
| ctattgctca | agcaaaggaa | ccaagatcac | accaaaagtt | caaacatatt | gtgcgaaggg | 300 |
| atcacttgat | tagagagata | atacaacgag | gtgacgttaa | gattgaaaat | gtttatggaa | 360 |
| aggagaatgc | aacaga | | | | | 376 |
| . <210> <211> <212> <213> <400> | 5383 219 DNA Glycine max 5383 | κ | | | | |
| agctttaaca | aatgtcttca | cgaataatca | ttacacagga | gaaaactaag | cccactaccc | 60 |
| ctcatatcta | ccaaaacccc | atacccacga | atatgaagag | ggaaagaagt | ccaccccaac | 120 |
| ctgaaatttc | gaaggcccac | tcgtaaccac | gcacttcacg | actccaaaaa | tgctctcctt | 180 |
| tcacgatttg | gggcataaat | ggtggccaaa | ggttgaaac | | | 219 |
| <210> <211> <212> <213> | 5384 464 DNA Glycine max | × | | | | |
| <400> | 5384 | · | | | | |
| acactataca | atacctcagc | ttcactgaat | agcttgtgtt | attgaagaat | attcttcttg | 60 |
| aatagaacac | gttacccaaa | aatcagtacg | aggcaaataa | gatattatgt | cttgcacata | 120 |
| tggagtacca | aaaaatacat | gcatgcccta | ataattacat | tttgtataga | aatcagtttg | 180 |
| tcgaaacaca | caaatacccc | acaagtgggt | atcacagtac | aaattgaagg | ataacacatg | 240 |
| tggtgatgat | gcaacgaaaa | acaacaacta | tttatcaaag | gtgtgctaat | atctttcaat | 300 |
| tattccaagg | ttgcagtgat | tgttttctaa | tggacatgat | accaaaaaac | ttaacatggc | 360 |
| atgcagctgg | tagaaaaagt | gatggattgc | tccaacatcc | ccgtgattat | ccctaataga | 420 |

| agacaattga | tcatttgtat | cctaaaattg | cataggacct | atga | | 464 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5385 98 DNA Glycine max | c | | | | |
| <400> | 5385 | | | | | |
| ttacccatat | cgttttaggg | tttttatgat | gatgctcgcg | atgtttatgt | gctggcatcg | 60 |
| attatggtca | actggccgtt | atgaatggtc | cagtgggc | | | 98 |
| <210> <211> <212> <213> | 5386 341 DNA Glycine max | ς | | | | |
| <400> | 5386 | | | | | |
| tgaaggcgtg | tcacccacca | tcttctcata | gtttaacacc | gataacatgt | ctactatgat | 60 |
| tgttatcatc | tccctcttca | tcattggggg | cgttacttga | gctgccagat | gccttcacct | 120 |
| ttgggcatat | tctttgaaag | attcatgctc | ctttttacac | atgttctgta | gctgcattct | 180 |
| atcaggaacc | atattagaat | tgtactgatg | ctacctaatg | aaagaaacca | ttaggtcctt | 240 |
| ccaagaatgg | actctggaag | gttccagatt | actatactat | gtgacagctg | ccccagtaag | 300 |
| actttcctag | tgtcataccc | taaattcgtc | tggggatgat | С | | 341 |
| <210> <211> <212> <213> | 5387 265 DNA Glycine max | · « | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttgggca | ttttcttt | tctctgttat | acaaatatat | gtcgngtatt | gagaaacaaa | 60 |
| attttactct | ccattcgacg | cacatgtggg | tttttagttg | ttgattttca | catttaaatt | 120 |
| tgagaataac | aaatgtttga | ataaaatgag | gtcgacatga | gtttttacat | acattttaat | 180 |
| accctgctga | tctcactttt | ggaaacaaca | aaataaaagc | tttgtatttt | aattttttgg | 240 |
| aacttgtgtg | ggtcagatgc | tttcc | | | | 265 |

| <210> <211> <212> <213> | 5388 530 DNA Glycine max | c | | | | |
|---|--|---|--|---|--|---|
| <400> | 5388 | | | | | |
| ttgacaaatg | aataaggttc | catggagatg | atagacataa | ctaagaggga | tggaagtgtc | 60 |
| catttgtttg | ttttgcatcc | agttctaaag | caagctaaaa | atgtccaagt | gccaaataac | 120 |
| ctggtaggta | aacaaaatgt | gacattaatt | cgtacttttg | cttcattgga | aatagactta | 180 |
| tgtttgattt | tacaaagagg | gatggaagtg | tccattttgt | agttttttt | atgacattgt | 240 |
| ggcacaggac | aacaatgggg | cagcccaaca | taatggacct | ataccactta | atagtccact | 300 |
| tcaagtcaat | ggaccaatag | tatatgatgg | agcatgtaaa | tgtattgcgt | ctattgaagt | 360 |
| taatgtgtaa | cattcctgct | tctaggatca | atgactaact | tcacaaaaca | caaaaaagct | 420 |
| ttcaaacggg | tttagtcctt | attcacggtt | ttctggggaa | actttcccaa | aaggcacccc | 480 |
| tttcccttaa | ctaacctaat | accaaaatcc | cttaactatt | aagatcttaa | | 530 |
| <210> <211> <212> <213> | 5389 550 DNA | | | | | |
| | Glycine max | ζ | | | | |
| <400> | 5389 | | tagatatgta | aaattotaaa | actagacttt | 60 |
| <400> | 5389 cataagcatt | gccttcatgg | | | | 60 |
| <400> agcttgtcag | 5389 cataagcatt ctatacaatt | gccttcatgg cacctagcag | ttgtaaaaag | tccagggggc | tgaaaaagga | 120 |
| <400> agcttgtcag ttagttggat tgattatata | 5389 cataagcatt ctatacaatt atgcacaata | gccttcatgg cacctagcag ttgaaaatat | ttgtaaaaag tgttgtatga | tccagggggc ttgtgctaat | tgaaaaagga cctaattgta | 120 180 |
| <400> agcttgtcag ttagttggat tgattatata ttgagaatat | 5389 cataagcatt ctatacaatt atgcacaata tgctacatga | gccttcatgg cacctagcag ttgaaaatat ttgtgctgat | ttgtaaaaag tgttgtatga cttaattgat | tccagggggc ttgtgctaat tctatttgta | tgaaaaagga cctaattgta ttaattctga | 120 180 240 |
| <400> agcttgtcag ttagttggat tgattatata ttgagaatat ttgtatgta | 5389 cataagcatt ctatacaatt atgcacaata tgctacatga taattcttat | gccttcatgg cacctagcag ttgaaaatat ttgtgctgat tggattttaa | ttgtaaaaag tgttgtatga cttaattgat ttttattttg | tccagggggc ttgtgctaat tctatttgta tatcttgatc | tgaaaaagga cctaattgta ttaattctga tcttgattat | 120 180 240 300 |
| <400> agcttgtcag ttagttggat tgattatata ttgagaatat ttgtatgta | 5389 cataagcatt ctatacaatt atgcacaata tgctacatga taattcttat tatttttagg | gccttcatgg cacctagcag ttgaaaatat ttgtgctgat tggatttaa atagatagtt | ttgtaaaaag tgttgtatga cttaattgat ttttattttg gtatcagata | tccagggggc ttgtgctaat tctatttgta tatcttgatc tgtcaggaaa | tgaaaaagga cctaattgta ttaattctga tcttgattat agctataaga | 120 180 240 300 360 |
| <400> agcttgtcag ttagttggat tgattatata ttgagaatat ttgtatgta | 5389 cataagcatt ctatacaatt atgcacaata tgctacatga taattcttat tatttttagg ttaggtggtt | gccttcatgg cacctagcag ttgaaaatat ttgtgctgat tggattttaa atagatagtt ggatgacctt | ttgtaaaaag tgttgtatga cttaattgat ttttattttg gtatcagata . gtatatatat | tccaggggc ttgtgctaat tctatttgta tatcttgatc tgtcaggaaa ctatcaattg | tgaaaaagga cctaattgta ttaattctga tcttgattat agctataaga tttttaatag | 120 180 240 300 360 420 |
| <400> agcttgtcag ttagttggat tgattatata ttgagaatat ttgtatgta | 5389 cataagcatt ctatacaatt atgcacaata tgctacatga taattcttat tatttttagg ttaggtggtt acaaggagga | gccttcatgg cacctagcag ttgaaaatat ttgtgctgat tggattttaa atagatagtt ggatgacctt ggtgaagcaa | ttgtaaaaag tgttgtatga cttaattgat ttttattttg gtatcagata . gtatatatat aagctaagga | tccaggggc ttgtgctaat tctatttgta tatcttgatc tgtcaggaaa ctatcaattg gaatgaaact | tgaaaaagga cctaattgta ttaattctga tcttgattat agctataaga tttttaatag cgagatgtca | 120 180 240 300 360 420 480 |
| <400> agcttgtcag ttagttggat tgattatata ttgagaatat ttgtatgta | 5389 cataagcatt ctatacaatt atgcacaata tgctacatga taattcttat tatttttagg ttaggtggtt | gccttcatgg cacctagcag ttgaaaatat ttgtgctgat tggattttaa atagatagtt ggatgacctt ggtgaagcaa | ttgtaaaaag tgttgtatga cttaattgat ttttattttg gtatcagata . gtatatatat aagctaagga | tccaggggc ttgtgctaat tctatttgta tatcttgatc tgtcaggaaa ctatcaattg gaatgaaact | tgaaaaagga cctaattgta ttaattctga tcttgattat agctataaga tttttaatag cgagatgtca | 120 180 240 300 360 420 |

| <210> <211> <212> <213> | 5390 452 DNA Glycine max | × | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5390 | | | | | |
| tccatcaagt | ttgaatcctt | gtttgttcgg | attccccata | taattcactt | cctatgcagc | 60 |
| atcatcaagg | ggtatacaac | aactagattc | atatgctcct | ccacatatac | tacaacctcc | 120 |
| aacctgtatt | actactgaat | gggaaggttg | aactacttgc | agttgggttg | gcagcttact | 180 |
| aagtgtctct | gtcaatgatt | ccagttgttt | agctaacaac | ttgttcagtg | ccaacagtgc | 240 |
| atcttgtgaa | gaaatctcta | gtaagcttct | ctttgtgggt | acatgagttc | tatcacacag | 300 |
| aatagcatga | tcactagtag | ccatattctc | aataagttcc | atttcttctt | caggagtctt | 360 |
| taatttaatt | tttcctcaag | aagaagcatc | caataactgc | ttggactgca | gtctcaaacc | 420 |
| atcaatgaaa | atgttcagct | gaatcggttt | gg | | | 452 |
| <210> <211> <212> <213> | 5391 527 DNA Glycine man | × | | | • | |
| <400> | 5391 | | | | | |
| | atcctcacct | | | | | 60 |
| | agtaagttaa | | | | | 120 |
| | agaacacatt | | | | | 180 |
| | | | | | aagttataga | 240 |
| caccttgatc | agttaataaa | gacattagaa | gctgctttac | tgccaaaatt | aaacgaaaga | 300 |
| ttttctttt | tattggtttg | aattacagat | agtttaacag | cttgtggata | atatcaacca | 360 |
| caggtttctt | tttcctgtca | tcatggcata | gcaaaggcca | agtatgagaa | ctgaaatatg | 420 |
| gaaaacatgt | tggtaatcaa | taccttaata | cattgatgta | ttccgaagca | attccttccc | 480 |
| acattatttg | ttggaaaaag | aggatcatct | atgtgaattg | gatcaat | | 527 |
| <210> <211> <212> | 5392 515 DNA | | | | | |

| <213> | Glycine max | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|-----|
| <223> <400> | unsure at all n locati 5392 | lons | | | |
| tccttaacca | gaacactcta agtggatcca | agtagagcca | agttcataag | agtgtctata | 60 |
| aacaactttc | tatgaggacc ctcgatagaa | ggcatcttga | aaggtgtagt | attcatcccc | 120 |
| ttatgagaaa | tgtgagtgat ggaagcaatt | caagtacaaa | ggtgataatg | agttgaaata | 180 |
| tgtaattgat | gttgtaattg attatagaaa | tattaattta | attcaaagga | ttaggttctt | 240 |
| caatgaaatg | gatgattaat aaattaattc | attaaggatt | catatgaaaa | tgattacttt | 300 |
| tcatatcaat | caatcacaaa cagatgatca | atgacatgtt | catgatcata | attaactgca | 360 |
| caaatctcga | ccttttttat tgattatgta | tctcaaccct | ttaaaatatt | ttatgttaaa | 420 |
| tanagcatac | agcatatata aaattgaatc | gaaaaaagac | tacattntat | gcaattcatt | 480 |
| attgaactac | tgtggcatct ataaaattac | acttc | | | 515 |
| <210> <211> <212> <213> | 5393 523 DNA Glycine max | | | | |
| <400> | 5393 | | | | |
| agcttgccca | gagaaggagt ccacagagga | aatgcttacc | acctcaaaag | actggaaagc | 60 |
| ggtttctaat | gactcctctg cggcctccac | ataaggcata | gaagatgggc | agctcaccaa | 120 |
| gatgtcttcc | tcgcctgaca cgatgaccaa | atgcccctcc | actacgaatt | tcaacttttg | 180 |
| gtggagtgta | gagggcacaa ctcccattga | gtggatccac | ggacgcccca | acagacagct | 240 |
| gtagggggg | ttaatatcca ttatttggaa | ggtgacttga | caggtgtgag | ggcctatttg | 300 |
| tactgggaga | tcgatctctc ccctaacctc | tcggcgagtg | ccgtcgaagg | cacgaaccac | 360 |
| cattgaactc | ggctttaagt gggaagcatt | gaatggtaat | ttctccaaag | tgctctttgg | 420 |
| catcacgttt | aaactggaac cattatcgat | gagcactttg | gctacgatat | ggtccataca | 480 |
| cttgactgat | accgtgaaag cctttgtatt | gccctctccc | cct | | 523 |
| <210> <211> <212> <213> | 5394 436 DNA Glycine max | | | | |

| <400> | 5394 | | | | | |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tttggtacaa | agaagaagaa | gaagttcata | gagatctcag | gcttggtaag | gattgtaaga | 60 |
| gatttttcaa | aatgcataac | aaagccttgc | ttttatagac | tcttgatgtc | tggtcaagaa | 120 |
| gaccattcag | aagagttatg | acttttagaa | aaacttaaaa | cccatttgac | aaagtcaaaa | 180 |
| cctttgtgaa | gagttacatc | tttagatttt | tcagagacaa | acactggtaa | tcgattacca | 240 |
| aataagtgta | atcgattaca | ctaagctttt | gagtgaaagg | atgtgactct | tcacattgaa | 300 |
| atttgaattt | caacgttcaa | gggcactggt | aatcgaftac | cagaacattg | taatcgatta | 360 |
| cagccttttg | aatatatttg | gaacggtgta | aagtcagttt | gaaagtcttt | tcaaacttat | 420 |
| ttttgctact | agtaat | | | | | 436 |
| <210> <211> <212> <213> <400> | 5395 516 DNA Glycine ma: | x | | | | |
| | | caatctgact | aaagcctcat | tggaactcgt | tcagttaatt | 60 |
| | | | | ttcttcttct | | 120 |
| | | | | caacatcaga | | 180 |
| _ | | | | | | 240 |
| | | | | atacaacaaa | | |
| | | | | tctaaaatgt | | 300 |
| | | | | aggtttggat | | 360 |
| agagacaaac | caacatccca | atgatagaaa | ttagaaacct | accattccta | ccacactatc | 420 |
| atccattaaa | caaagtagac | atttaggaca | atttcaattt | caagggacaa | agctagaaag | 480 |
| cagatcactt | ttcaaaaaaa | ctagctgcca | acaaca | | | 516 |
| <210> <211> <212> <213> | 5396 436 DNA Glycine ma | x | | | | |
| <400> | 5396 | | | | | |
| tgatcaaccc | cattttccat | gcaaaacatg | ttgattaatc | attcaaacaa | tcaaaacaaa | 60 |

| tattcccaaa | ctgaatgcaa | tgaacataaa | attaaaaagg | actgggttgc | ctctcagcaa | 120 |
|----------------|----------------|------------|------------|------------|------------|-----|
| acgctcgttt | aacgtcatta | gcttgatgca | tcttacttta | tggatcaagg | tcaaacttgg | 180 |
| ttccaacctt | cagaaccttc | tccttctcca | cttcatctat | ctcaaaatag | acattttggt | 240 |
| cctgcaaatg | cttttcttcc | tcaaataagt | cgaagttgat | cttctgatta | tcaacaccca | 300 |
| tctccagctt | cttctttccc | atatctacca | catagctggc | agttaacatg | aaaggacatc | 360 |
| ccaagatcaa | agggatttca | gagtcctctt | cgatgtccat | tacaacaaaa | tcagttggga | 420 |
| aaatgaaatg | ctttac | | | | | 436 |
| | | | | | | |
| <210> | 5397 | | | | | |
| <211> | 453 | | | • | | |
| <212> | DNA | ·r | | | | |
| <213> | Glycine max | X. | | | | |
| <400> | 5397 | | | | | |
| agcttacatg | caaacctata | acacaaggat | gcataacctt | tatttttat | gtgaaggatg | 60 |
| cataacctta | ttcaggtata | atatgagata | aaatccctat | cttgttttaa | gaattgcacc | 120 |
| aacagtacca | taggtactgt | gtctcaacac | attttaagtt | tttcccattg | tttaatgcat | 180 |
| ttaagggatc | caaccaagac | agtatagcta | aattgattga | atatgatgcg | tgagcgatta | 240 |
| taaacctctc | agtacatgtc | ttcgattcct | acagacaaaa | aaaaaaagaa | tccaaggtgc | 300 |
| aagtttgaaa | atatgttcat | cctttaaact | ttttttgtgc | ctccaatccg | ttgactatga | 360 |
| gtttgtgtat | tggcagcaaa | atatatttt | aaaaatgtca | tgatgaatta | ctgaaggatt | 420 |
| agcattttaa | caagcagcac | aaaccataat | cat | | | 453 |
| | | | | | | |
| <210> | 5398 | | | | | |
| <211> | 479 | | | | | |
| <212> <213> | DNA Glycine ma | x | | | | |
| \213 / | Olyclic ma | •• | | | | |
| <400> | 5398 | | | | | |
| tattgcactg | caaggtcaac | ggatattgga | gataataatg | aacgccattt | tactctctat | 60 |
| gttgatcata | cattaagaag | agaaaagagg | cttagtgttt | cttgtctgct | caatttgtat | 120 |
| ccactaaaaa | agttaacacc | attttttac | ttgaaaatta | tattgtctta | tttttcatca | 180 |
| tcaatttaag | acatttttcc | aaattaatca | ccgaaaaaac | atttactagt | ttgggatagt | 240 |

| ttttgtcata | tgatgactga | atactatttt | attttgctat | ttttataaca | tgcgaaacat | 300 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| gccaaaaatt | aaaaacactg | caacaagcaa | aatgtattaa | atactaaaca | agttttgtcc | 360 |
| cttacatatg | tgagagtcat | ttacataaat | ggaaacaatg | gaagaaaaca | ctataacttc | 420 |
| tctttgtacg | taccacatgt | ttattaatgt | tctgcaacct | accttcacca | caagccatg | 479 |
| <210> <211> <212> <213> | 5399 333 DNA Glycine max | · · | | | | |
| <400> | 5399 | | | | | |
| agcttgacgt | cttaaaaatc | aatggttttt | attagtgatt | gactacatat | gtctctcaac | 60 |
| ataaattatt | agtactatca | ttactatgat | ctġtagctga | gcagtcacat | ctggataaac | 120 |
| acgcggagct | gaagtgtgtt | aaattaatat | cttgagttgc | catacttaca | aacaaatgtg | 180 |
| attaggctag | cattaatttg | taatgcccag | gtgtcttaac | tactatcata | ttacatgcgt | 240 |
| gttaacatat | aagctccgac | ctaaactcga | atataaaaat | acgtatggtg | agttattatt | 300 |
| aacaatatga | tctgctgaat | atgttaagtc | aaa | | | 333 |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | | | |
| <400> | 5400 | | | | | |
| | | | | ctttagtgtt | | 60 |
| gttagaaact | ccgtttcatg | ctttccaaag | cattttttca | cttttctagg | cagcaaaacg | 120 |
| tgattgacaa | aaattgtcac | ttcgaacacc | accgatggta | atgttgcgtt | tatttgttta | 180 |
| aacttattaa | aaaagttttt | tctaaataaa | ataagcagtt | gtgtttttta | atgtttgctt | 240 |
| aaagtacttt | tgctttttaa | aaaaaatgtt | ttttcaagaa | gcaaattttt | atctgcttga | 300 |
| aaaacactct | tttcacaaat | gttttttt | tcaagtttaa | ataaacaagc | ccaataattc | 360 |
| ttgaagtata | gacataagct | aggattgaag | cctttacaaa | gtccttaatt | ttatttattt | 420 |
| tttatagatt | ntgttcattg | ttctaaaaat | atatnaataa | atttgacttt | tttgttataa | 480 |

| tatcctgaat | ggtatgttgc a | atctatcact | ctttg | | | 515 |
|----------------------------------|---|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5401 402 DNA Glycine max | | | | | |
| <400> | 5401 | | | | | |
| agcttgaagg | tgtgtagccc a | accatctttt | catagtagaa | tactggtaat | gtgtctacta | 60 |
| tcattgacat | catttttttc t | tttgtcattg | agggaaacac | ttgggctacc | agatecetee | 120 |
| acctttgggc | gtattctttg a | aaagatctgt | gcccccctt | tttttgcaca | tgttttgtag | 180 |
| ttgcatccta | tccaaagcca t | ttatactgac | actgcctaac | gaaggcgacc | attatgtcct | 240 |
| tccaagaata | gactcgggaa g | ggttccaagt | tagtgtacca | ggtaacagct | accccagtaa | 300 |
| gactttcttg | gaaggaatgt a | atcaacaatt | cctcatcttt | tgcgtatgcc | cccatctttc | 360 |
| cgacaataca | tctttagatg (| gtttttgggg | caagtagtcc | СС | | 402 |
| <210> <211> <212> <213> | 5402 448 DNA Glycine max 5402 | | | | | |
| | cttacggtaa | aatetaggae | ttagccatgg | tagaagtete | cacagtggcc | 60 |
| | tcgcccaata | | | | | 120 |
| | ctatggtaga | | | | | 180 |
| | tcttctcagg | | | | | 240 |
| | aggaattaga | • | | | | 300 |
| | tggaggcaaa | | | | | 360 |
| | gaaatgagca | | | | | 420 |
| | cacctttttc | | | | | 448 |
| ggcaggccca | | <i>5</i> | | | | |
| <210> <211> <212> <213> | 5403 226 DNA Glycine max | | | | | |

| <400> 5403 ccatgcaaaa tttctgtctt ccacctaat tcataatgat tcatatgggt ttatacgaac 60 tcgcttactt aagaaaacca aatgatggtg atgggagett gccttcaatg getgcaaaaa 120 aaaatgagag acacacgtcc tcacaggcat tteggacttc taaaatgttt gcgtgcgcta 180 cacacggcta ttgctaaaag gatggtgatc tgcattcaac gtctgg 226 <210> | | | | | | | |
|--|-------------------------|---------------------------|-------------|------------|------------|------------|-----|
| tcgcttactt aagaaaacca aatgatggtg atgggagctt gccttcaatg gctgcaaaaa 120 aaaatgagag acacacgtcc tcacaggcat ttcggacttc taaaatgttt gcgtgcgcta 180 cacacggcta ttgctaaaag gatggtgatc tgcattcaac gtctgg 226 <210> | <400> | 5403 | | | | | |
| aaaatgagag acacacgtcc tcacaggcat ttcggacttc taaaatgttt gcgtgcgcta 180 cacacggcta ttgctaaaag gatggtgatc tgcattcaac gtctgg 226 <210> 5404 <211> 430 <212> DNA <213> Glycine max 400 5404 tttgcaagct ggaatcattt atcctatctc cgatagccaa tgggtgagtc ccgtccaggt 60 agtcccgaag aagactggcc tcacagtgat cagaaatgag aaggaggagt tgattcctac 120 tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 180 aaaggaccat tttcccctgc cattcattga ccagatgtt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg attttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcactttt gcttataaga aggatgcttt 420 tttagaaaat | ccatgcaaaa | tttctgtctt | ccaccttaat | tcataatgat | tcatatgggt | tttatcgaac | 60 |
| cacacggcta ttgctaaaag gatggtgatc tgcattcaac gtctgg 226 <210> 5404 <211> 430 <212> DNA <213> Glycine max <400> 5404 tttgcaagct ggaatcattt atcctatctc cgatagccaa tgggtgagtc ccgtccaggt 60 agtcccgaag aagactggcc tcacagtgat cagaaatgag aaggaggagt tgattcctac 120 tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 180 aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg attttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaaag accacattca dctgcccctt cggcactttt gcttataaga agatgccttt 420 tttagaaaat | tcgcttactt | aagaaaacca | aatgatggtg | atgggagctt | gccttcaatg | gctgcaaaaa | 120 |
| <pre> <210> 5404 <211> 430 <212> DNA <213> Glycine max </pre> <pre> <400> 5404 tttgcaagct ggaatcattt atcctatctc cgatagccaa tgggtgagtc ccgtccaggt 60 agtcccgaag aagactggcc tcacagtgat cagaaatgag aaggaggagt tgattcctac 120 tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 180 aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg attttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcacttt gcttataaga agatgccttt</pre> | aaaatgagag | acacacgtcc | tcacaggcat | ttcggacttc | taaaatgttt | gcgtgcgcta | 180 |
| <pre><211> 430 <212> DNA <213> Glycine max </pre> <pre><400> 5404 tttgcaagct ggaatcattt atcctatctc cgatagccaa tgggtgagtc ccgtccaggt 60 agtcccgaag aagactggcc tcacagtgat cagaaatgag aaggaggagt tgattcctac 120 tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 180 aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg attttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcactttt gcttataaga agatgccttt 360 tggcctgtgc aatgcccctg gtaccttcta gcggtgcatg attaatatt tcagtgattt 420 tttagaaaaat</pre> | cacacggcta | ttgctaaaag | gatggtgatc | tgcattcaac | gtctgg | | 226 |
| agtcccgaag aagactggcc tcacagtgat cagaaatgag aaggaggagt tgattcctac 120 tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 180 aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg atttttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcactttt gcttataaga agatgccttt 360 tggcctgtgc aatgcccctg gtaccttcta gcggtgcatg attaatattt tcagtgattt 420 tttagaaaaat 430 <210> 5405 <211> 874 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5405 ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataaagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | <211> <212> <213> | 430 DNA Glycine ma: | x | | | | |
| tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 180 aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg attttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcactttt gcttataaga agatgccttt 360 tggcctgtgc aatgcccctg gtaccttcta gcggtgcatg attaatattt tcagtgattt 420 tttagaaaat 430 <210 | tttgcaagct | ggaatcattt | atcctatctc | cgatagccaa | tgggtgagtc | ccgtccaggt | 60 |
| tcgggtgcag aacagttgga gagtctgcat tgactatagg aggctgaacc atgttaccaa 240 aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg attttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcactttt gcttataaga agatgccttt 360 tggcctgtgc aatgcccctg gtaccttcta gcggtgcatg attaatattt tcagtgattt 420 tttagaaaat | agtcccgaag | aagactggcc | tcacagtgat | cagaaatgag | aaggaggagt | tgattcctac | 120 |
| aaaggaccat tttcccctgc cattcattga ccagatgctt gaacgcctgg caggtaaatc 240 ccactactgt ttccttgatg atttttctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca cctgcccctt cggcactttt gcttataaga agatgccttt 420 tttagaaaat cc2ggggggggggggggggggggggggggggggggggg | tcgggtgcag | aacagttgga | gagtctgcat | tgactatagg | aggctgaacc | atgttaccaa | 180 |
| ccactactgt ttccttgatg attittctgg ttatatgcaa attactattg ctcctgagga 300 tcaggaaaag accacattca dctgcccctt cggcactttt gcttataaga agatgccttt 420 tttagaaaat | | | | | | | 240 |
| tggcctgtgc aatgcccctg gtaccttcta gcggtgcatg attaatatt tcagtgattt 420 tttagaaaat 430 <210 > 5405 <211 > 874 <212 > DNA <213 > Glycine max <223 > unsure at all n locations <400 > 5405 ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg attcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgtta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | ccactactgt | ttccttgatg | atttttctgg | ttatatgcaa | attactattg | ctcctgagga | 300 |
| tttagaaaat | tcaggaaaag | accacattca | detgeeeett | cggcactttt | gcttataaga | agatgccttt | 360 |
| <pre> <210> 5405 <211> 874 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5405 ttgaatgcat gcattgcccg ngatnetnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttetteat cgccgaaagg 120 tacgccttga gcccttgtaa acattgtta acatatatac cataaataat caccctatte 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggtt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300</pre> | | | | | | | 420 |
| <pre><211> 874 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5405 ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300</pre> | tttagaaaat | | | | | | 430 |
| <pre><211> 874 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5405 ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300</pre> | | | | | | | |
| C212> DNA C213> Glycine max C223> unsure at all n locations C400> 5405 ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgtta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | | | | | | | |
| <pre><213> Glycine max <223> unsure at all n locations <400> 5405 ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgtttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300</pre> | | | | | | | |
| <pre>ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300</pre> | | Glycine ma | x | | | | |
| ttgaatgcat gcattgcccg ngatnctnta gagtcgaccc gcggcatgca agcctaacat 60 agcgatgtgt atatggcaca cgatgttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctctgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | | | all n locat | ions | | | |
| agcgatgtgt atatggcaca cgatgtttta tacactgatg atttcttcat cgccgaaagg 120 tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | <400> | 5405 | | | | | |
| tacgccttga gcccttgtaa acattgttta acatatatac cataaataat caccctattc 180 cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | ttgaatgcat | gcattgcccg | ngatnctnta | gagtcgaccc | gcggcatgca | agcctaacat | 60 |
| cttgacttaa tataatagat gactacagct ccaataagat cctgtggttt aaacactatt 240 tataagcacc atcctcttgt aataatgcca tttgtatggt atccacccta tgacacgtag 300 | agcgatgtgt | atatggcaca | cgatgtttta | tacactgatg | atttcttcat | cgccgaaagg | 120 |
| tataagcacc atcetettgt aataatgcca tttgtatggt atceacceta tgacacgtag 300 | tacgccttga | gcccttgtaa | acattgttta | acatatatac | cataaataat | caccctattc | 180 |
| talaageace alecterige adeaacgeed totageacggo about the same see | cttgacttaa | tataatagat | gactacagct | ccaataagat | cctgtggttt | aaacactatt | 240 |
| aagctataat tgatttgaat atgatacggg tgcgactatg aaactctgat tccaagacta 360 | tataagcacc | atcctcttgt | aataatgcca | tttgtatggt | atccacccta | tgacacgtag | 300 |
| | aagctataat | tgatttgaat | atgatacggg | tgcgactatg | aaactctgat | tccaagacta | 360 |

| cgattcctcc | atccaaaata | taaaagataa | tctctatgag | gcgaggaaag | aaggtaatgc | 420 |
|---|--|---|---|---|---|--|
| tetteetett | taacatttta | tttgagccta | ccgatccgac | gacatataag | tcgagtattg | 480 |
| gactcaaaaa | atatttttat | atattgtaac | ataaactcct | gaatgatttg | gttaatagca | 540 |
| tcccccaaca | agcatattca | tcgataactg | tcacactgtc | tctcccacac | aggggcatgc | 600 |
| agataggatt | ataagtctca | ccgcgtgtct | ttcggggaaa | atattcctat | ccacaaaaga | 660 |
| ttttgaacag | ggctatgaga | ccgcttccgt | atttctgtaa | cgaaaataat | gaaatccttc | 720 |
| tagctgagcc | ttggcgagac | ccggagaaaa | cattcagagt | ttatacaccg | tctcttagaa | 780 |
| caagcgcact | taagactcct | ctccattcgc | tgagacctca | aaatttttt | ttcaataata | 840 |
| gacgctctat | ataaaggggt | tcccctatta | aacc | | | 874 |
| <210> <211> <212> <213> | | x all n locat | ions | | | |
| - 400- | L/1116 | | | | | |
| <400> | 5406 | gagattgaga | cattatgatg | ccctttacct | atctatgccg | 60 |
| atagccctgt | ggagtcacct | | | ccctttacct | | 60 120 |
| atagccctgt atcattgatt | ggagtcacct tagagcagaa | tagaagccta | ttgtgaaatg | gccgctcaat | tccgcttccc | |
| atagccctgt atcattgatt tcaaggagtt | ggagtcacct tagagcagaa gacgcgcttt | tagaagccta gtgtatcttg | ttgtgaaatg gaaaggaatt | gccgctcaat | tccgcttccc | 120 |
| atagecetgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg | tagaagccta gtgtatcttg tgtccaaatt | ttgtgaaatg gaaaggaatt aagtaaccgg | gccgctcaat aagctcgtag aaaatacact | tccgcttccc aataatcagt ttactaactt | 120 180 240 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg | tagaagccta gtgtatcttg tgtccaaatt taatgatgac | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact | gccgctcaat aagctcgtag aaaatacact aattttattt | tccgcttccc aataatcagt ttactaactt ttgatagtct | 120 180 240 300 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt | 120 180 240 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca ttgcgaatac | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa tatttggtcc | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac cctcaccata | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca ttgtagagga | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt ggtcatttta | 120 180 240 300 360 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca ttgcgaatac tacaacaaag | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa tatttggtcc tggacagatg | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac cctcaccata aaccactatt | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca ttgtagagga atctttcttc | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt ggtcatttta ttttgaccgt | 120 180 240 300 360 420 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca ttgcgaatac tacaacaaag | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa tatttggtcc tggacagatg | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac cctcaccata aaccactatt taccttttcc | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca ttgtagagga atctttcttc accaaccatt | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt ggtcatttta ttttgaccgt gtattaatat | 120 180 240 300 360 420 480 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca ttgcgaatac tacaacaaag gtgataacat ttattaatgg | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa tatttggtcc tggacagatg tctggaaccc | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac cctcaccata aaccactatt taccttttcc | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca ttgtagagga atctttcttc accaaccatt taacgtggaa | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt ggtcatttta ttttgaccgt gtattaatat aaaaatgcct | 120 180 240 300 360 420 480 540 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca ttgcgaatac tacaacaaag gtgataacat ttattaatgg ggacaattgg | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa tatttggtcc tggacagatg tctggaaccc gggacctaaa | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac cctcaccata aaccactatt taccttttcc cgttggcatt | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca ttgtagagga atctttcttc accaaccatt taacgtggaa ttaaccttct | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt ggtcatttta ttttgaccgt gtattaatat aaaaatgcct tggcttgcac | 120 180 240 300 360 420 480 540 600 |
| atagccctgt atcattgatt tcaaggagtt agtgtagtgt | ggagtcacct tagagcagaa gacgcgcttt gggagagtgg ttttttgtca ttgcgaatac ttacaacaaag gtgataacat ttattaatgg ggacaattgg acaccttgtcaacacct | tagaagccta gtgtatcttg tgtccaaatt taatgatgac attgcccaaa tatttggtcc tggacagatg tctggaaccc gggacctaaa tgaactctcg | ttgtgaaatg gaaaggaatt aagtaaccgg ttgcatgact aattaaaaac cctcaccata aaccactatt taccttttcc cgttggcatt tttgccctac | gccgctcaat aagctcgtag aaaatacact aattttattt cactgcacca ttgtagagga atctttcttc accaaccatt taacgtggaa ttaaccttct | tccgcttccc aataatcagt ttactaactt ttgatagtct agcctaatgt ggtcatttta ttttgaccgt gtattaatat aaaaatgcct | 120 180 240 300 360 420 480 540 600 660 |

| tttggggatn | tatctctgtg | cnagactaaa | aaaatacaca | tacg | | 824 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5407 595 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a | ill n locati | lons | | | |
| tcttgagaag | cttccttgag | aagattccta | aagaagctag | agcttagcta | cacacacccc | 60 |
| ctataatagc | taagctcacc | cccatgccaa | aatacatgaa | aatataaaaa | aagtccctat | 120 |
| tacaaagact | actcaaaatg | ccctgaaata | caaggctaaa | accctatact | actagaatgg | 180 |
| ccaaaataca | aggcccaaaa | gaaggaaaaa | ccaattctaa | catttataaa | gaagaatgga | 240 |
| tccaaccttg | acccatgggc | tcaaaaatct | agcctaaagt | tcatgagaac | cctagggcct | 300 |
| tctttagtag | ctctagccca | agcctcttgg | agtcttctat | ccaataccct | tggnggtagg | 360 |
| attgcatcat | aatgtaatcg | attaaatact | caaagtaatt | gattaaagtg | ttcttgttca | 420 |
| cttctgaaca | actaagtgag | agagaagtaa | tcgattaaac | cactacgtaa | atgattaaag | 480 |
| tatagactct | tgaataatca | gtcatttgct | caaacaacag | tgtaatctgt | tagaagatat | 540 |
| ggagtagcaa | catgaacaac | ttaaccctaa | aacttgaagc | ccaaggctaa | agttt | 595 |
| <210> <211> <212> <213> | 5408 462 DNA Glycine max | × | | | | |
| <400> | 5408 | | | | | |
| tttgagaagt | attataagct | cggaattcat | agcctctgca | cttggatttt | gggataccaa | 60 |
| attgggcttt | gctctgtgca | atcaacttaa | ctagattaat | tatatgggcc | taatcaaagt | 120 |
| gttgaacaaa | tggcctcaat | aacttaagaa | gggggtgaat | taagtttaaa | atttttcctc | 180 |
| ttacaacttt | taaccccatt | ctaaatgata | agctcaaaat | gcacaagaag | aagcaacaat | 240 |
| caatttaata | atgttctttt | aacatgcaag | aaaaaattga | ttgcaataac | atatatgaga | 300 |
| ttagggaaga | gagaaatgcc | aacttgattt | atactggttc | gaccattttt | cgtgcctaca | 360 |
| tctaatcgtc | aagcaacttc | acttgagaat | tttcaatatc | ttttgtaaaa | tcctttttac | 420 |
| aacttttaac | acctaaagaa | tccctttccc | tttgttcaca | aa | | 462 |

| <210> <211> <212> | 5409 924 DNA | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <213> | Glycine ma | x | • | | | |
| <223> <400> | unsure at 5409 | all n locat: | ions | | | |
| tacgtaccta | acatccccgc | gcacacatna | ncgtntcaaa | ctcacttcct | gatcattnac | 60 |
| tgtttcttct | acgtatccat | naanacaann | ccaacacacn | naaggnnntt | tgattgcttg | 120 |
| gcagtcncct | gngatnctct | aggatacact | agaggcgagc | tgaacgcatg | ccacctttac | 180 |
| aaccttagaa | atcgagtgat | catacgtgcc | gcaatatctg | gggagacaac | accgatcatt | 240 |
| atctctatac | tatggctggc | agcctgctcc | aaccatgatt | ttacgaattg | tgatattttc | 300 |
| acaaacaagg | ggagatacta | actaccttgc | tgttgatgtt | ttccccacgt | aaatgatgat | 360 |
| atcaggcaat | tgtagaatat | gctcttttt | atattcgtga | aaactactct | actaaaagaa | 420 |
| cacacgacac | taatttcaaa | ataccactca | ttttttatga | acggaaatac | gtataggcat | 480 |
| atcgaaatgt | atagccctat | aaacaaaaat | atataaagat | ccacaaaggg | tttattttct | 540 |
| ggcgagtgga | caacccgaaa | agatgacctg | ttaccaccgc | tcaaatgtaa | ataatgacaa | 600 |
| cctcctgaca | attgaatttc | acatcttaga | ccgcgcattc | aaaaacccaa | ttgcgggaat | 660 |
| attctccact | ggttaccaaa | ccgtttaaaa | ataaacttaa | aaaacgggaa | ccgctactcg | 720 |
| gttttttaaa | aaaaggatat | ggacgcgatt | ccataacctt | ttcatacaga | atcccccnt | 780 |
| atacaaaggc | tccactcata | gaacaacaat | gaccgtgtaa | aaacttaacg | cttaacaaac | 840 |
| attcttccta | tttataaaaa | aaaaccaccc | tcgttcttca | aaaaagaaca | aagactttca | 900 |
| ttcttaacta | aactttgtgg | aaag | | | | 924 |
| <210> <211> <212> <213> | 5410 102 DNA Glycine max | × | | | | |
| <400> | 5410 | | | | | |
| ctttgtttgg | tggagtattg | atttttaaac | gacttaagcc | tagtcttgac | ccctagaatt | 60 |
| acaagtctac | catatggggc | ttctatatat | taattgatac | ac | | 102 |

| <210> | 5411 | | , | | | |
|----------------|-------------|--------------|-------------|------------|------------|-----|
| <211> | 569 | | | | | |
| <212> | DNA | • | | | | |
| <213> | Glycine max | κ . | | | | |
| • | | | | | | |
| <400> | 5411 | | | | | |
| | | | | | | |
| agcttccttg | agaagcttcc | ttgagaagat | tcctaaagaa | gctagagctt | agctacacac | 60 |
| | | | | | | 100 |
| accccctata | atagetaage | tcacccccat | gccaaaatac | atgaaaatat | aaaaaagtc | 120 |
| cctattacaa | agactactca | aaatacccta | aaatacaacc | ctaaaaccct | atactactac | 180 |
| cctattacaa | agactactca | adacycccty | adacacaagg | ccaaaacccc | acaccaccag | 100 |
| aatggccaaa | atacaaggcc | caaaagaagg | aaaaaccaat | tctaacattt | ataaagaaga | 240 |
| | | | | | 3 - 3 - | |
| atggatccaa | ccttgaccca | tgggctcaaa | aatctagcct | aaggttcatg | agaaccctag | 300 |
| | | | | | | |
| ggccttcttt | agtagctcta | gcccaagcct | cttggagtct | tctatccaat | acccttgggg | 360 |
| | | | | | | |
| gtaggattgc | atcataatgt | aatcgattaa | atactcaaag | taattgatta | aagtgttctt | 420 |
| | | | | . | | 400 |
| gttcacttct | gaacaactaa | gtgagagaga | agtaatcgat | taaaccacta | ggtaaatgat | 480 |
| taaantatan | actetteaat | aaatcactca | ttatatataaa | caacagtgta | atctottaga | 540 |
| caaagtatag | accertyaar | adaccageca | cegeeeeaag | caacagegea | accegeraga | 340 |
| gataagggag | tagcaacatg | aacaactta | | | | 569 |
| 55 | | | | | | |
| | | | | | | |
| <210> | 5412 | | | | | |
| <211> | 453 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| 222 | | . 7 1 . 7 | • | | | |
| <223> <400> | 5412 | all n locati | Lons | | | |
| <400> | 3412 | | | | | |
| taggccaatg | cttccatttt | gagagtcatt | ttaggettgg | aattcagagc | ctctgcactt | 60 |
| caggecaacg | ccccacccc | gagageeace | ccuggeccgg | aaccoagago | occupacion | |
| ggattttggg | atccgaaatt | gggctttgct | ttgtgcaatt | agcttaatta | gataaattag | 120 |
| | _ | | | | | |
| atgggcctaa | tcaaggtgtt | gaacaagtgg | cctcaataac | ttaagagggg | ggtgaattaa | 180 |
| | | | | | | |
| gtttcaaaat | ttttcctcta | acaaactttt | aaccccattc | taaatgatag | gctcagaatg | 240 |
| | | | | | | 200 |
| cagaagaaga | agcaacaatc | aatttaataa | tgttctttaa | acatgcaaga | aaaaattgat | 300 |
| taaataaa | taaatmamat | 2200022022 | agaaatggaa | acttoattta | tactoottoo | 360 |
| tycaataaca | | aayyyaayag | ayaaatycdd | acttgattta | cactygiteg | 200 |
| accatttctc | gtgcctacat | ctaatcotca | agcaacticac | ttgagatttt | tcactatett | 420 |
| | | | | | | |
| tgtaaaaatc | ctttntacaa | cttctgaaca | cct | | | 453 |
| • | | - | | | | |

| <210> <211> <212> <213> | 5413 477 DNA Glycine ma | × | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5413 . | | | | | |
| agcttgtcag | cataagcatt | gccttcatgg | tagatatgta | aaattctaaa | actaaacttt | 60 |
| ttagttggat | ctatacaatt | cacctagcag | ttgtaaaaag | tccagggggc | tgaaaaagga | 120 |
| tgattatata | atgcacaata | ttgaaaatat | tgttgtatga | ttgtgctaat | cctaattgta | 180 |
| ttgagaatat | tgctacatga | ttgtgctgat | cttaattgat | tctatttgta | ttaattctga | 240 |
| ttgtatgtat | taattcttat | tgtattttaa | ttttattttg | tatcttgatc | tcttgattat | 300 |
| tgggatcact | tatttttagg | atagatagtt | gtatcagata | tgtcaggaaa | agctataaga | 360 |
| gaaatcttag | ttaggtggtt | ggatgacctt | gtatatatat | ctatcaattg | gttttaatag | 420 |
| aggcagaaca | acaaggagga | ggtgaagcaa | aagctaacga | gaatgaaact | cgagatg | 477 |
| <210> <211> <212> <213> | 5414 536 DNA Glycine ma | × | | | | |
| <400> | 5414 | | | | | |
| tccatcaagt | ttgaatcctt | gtttgttcgg | attccccata | taattcactt | cctatgcagc | 60 |
| atcatcaagg | ggtatacaac | aactagattc | atatgctcct | ccacatatac | tacaacctcc | 120 |
| aacctgtatt | actactgaat | gggaaggttg | aactacttgc | agttgggttg | gcagcttact | 180 |
| aagtgtctct | gtcaatgatt | ccagttgttt | agctaacaac | ttgttcagtg | ccaacagtgc | 240 |
| atcttgtgaa | gaaatctcta | gtaggcttct | ctttgtgggt | acatgagttc | tatcacacag | 300 |
| aatagcatga | tcactagtag | ccatattctc | aataagttcc | atttcttctt | caggagtctt | 360 |
| taatttaatt | tttcctcaag | aagaagcatc | caataactgc | ttggactgca | gtctcaaacc | 420 |
| atcaatgaaa | atgttcagct | gaatcggttt | ggagaatcca | tgagttggtg | tttttcgcag | 480 |
| caagctacag | aatctctcaa | gtgcttcact | caaggactca | tcttgaaact | gatgga | 536 |
| <210> <211> <212> <213> | 5415 738 DNA Glycine ma: | × | | | | |

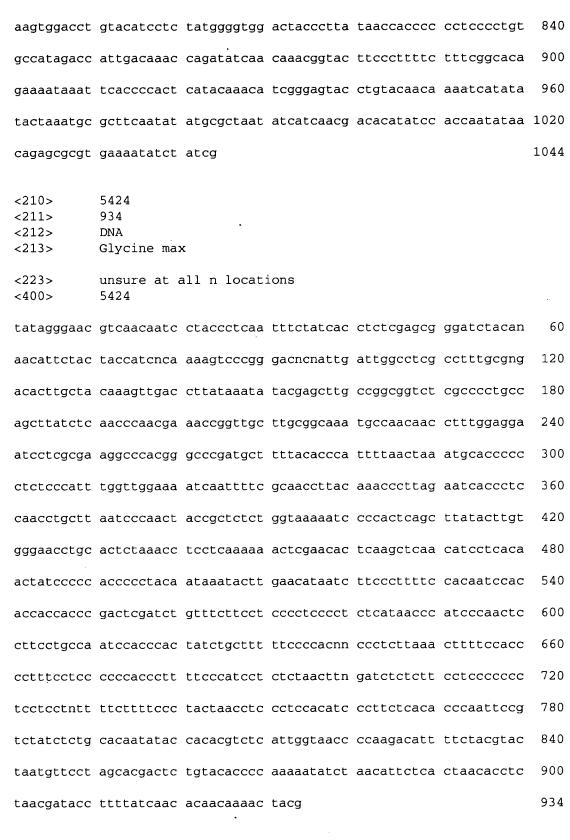
.....

| <223> <400> | unsure at a | all n locat: | ions | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttcaatacaa | gttatcagga | aaaaatatga | gttataatat | tcatgtaacg | aatttttaca | 60 |
| atatttttat | aatttgtttg | ttatacattt | cccccatta | ttatgccaat | catgatattt | 120 |
| taacaaatca | ttgatctata | cttcttactt | ttataattta | gttttctccg | tattatctat | 180 |
| cgcattagtc | atttatatta | tatacttttt | ttttatttgt | tgaaaatttt | gtacaaaatt | 240 |
| gacatacaat | tataatttca | atataaaaaa | cattatatat | atatatatat | atatatatat | 300 |
| atatatatat | atatatatat | atatatatat | atatatatat | atcccctccg | agatgtataa | 360 |
| cccgcaagga | cagtaagata | actntacctg | tcacatacac | ttggcttttt | ctaagtcaat | 420 |
| tccaggacta | gttaagtagg | tttttttatt | ctttctttca | cgaacttttt | ctcacaatga | 480 |
| tgcatgttcc | atcccataac | tatggaagaa | gaatctaaga | taccatgccc | ggggagtaat | 540 |
| ctttttataa | ttncttattc | tttggagcac | ccctctataa | taattatata | tccaaattaa | 600 |
| ttataccccg | tctcttatct | catgtatttt | gaatattgtg | gttggaaaat | attaaacctc | 660 |
| agctcttaca | aaaaaaaat | acctacccta | ctttatggaa | accttctggt | ggggatttcc | 720 |
| ttatcttatt | ggggggaa | | | | | 738 |
| <210> <211> <212> <213> | 5416 466 DNA Glycine max | x | | | | |
| <400> | 5416 | | | | | |
| tgctcacttt | gatactttgt | gcttgctttg | tcatttttgt | tcccatagct | cataggctag | 60 |
| ttaagattgt | gtataatcaa | ctacttttgc | attgactttg | ccatataatt | ccatgtcagg | 120 |
| tttatgctat | attgaaataa | attttcattg | actatgggtg | tctctgggaa | gtggattaaa | 180 |
| gcattggttg | gtctaaagaa | atcagaaaag | ccagagaagg | atggaaatgt | gagtctctct | 240 |
| ctcataacac | ttcatactca | tattcctgag | tttcagtatt | tattttcatg | ttatgttggc | 300 |
| aaaaataatc | atcacctatg | gcgcttttaa | ctaaggttct | gtatcatcat | gtagttattt | 360 |
| ctacccacac | taccccaaaa | gaaaaacaaa | agagttttgt | tgcttgtgtt | tcaactcaag | 420 |
| agggaaaaga | ttaatggttt | tcttgtgcat | ttgcgagtgt | catact | | 466 |

| <210> <211> <212> <213> | 5417 358 DNA Glycine max | κ | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|--------------|-----|
| <400> | 5417 | | | | | |
| agcttatata | tatcgattcg | ctcaaaatta | aacatcagaa | actctcaaga | aattcaaata | 60 |
| gtcataacta | ttcacacgga | tgtccgattc | gggcgcataa | tatgtcgaga | ggctcgaaat | 120 |
| tgaacaacgg | aagctgttga | gaaattcaac | tggtataact | ttttacaccg | atgtcccatt | 180 |
| cgggcgcata | atatgtcgag | aagctcgata | ttgaacaacg | aaagttcttt | agaaattcaa | 240 |
| atggtcataa | cttttcacac | ggatgtccga | ttcaggctta | taatatatcg | atacgctcca | 300 |
| aattaagcat | ccgaaactct | cgcgaaaatc | aaatggtcat | aacttttcac | acggatgt | 358 |
| <210> <211> <212> <213> | 5418 237 DNA Glycine ma: | ς. | | | | |
| | | | aastttasst | ttatataaa | . attacattat | 60 |
| | atccgtgtga | | | • | | |
| | acttctcgat | | | | | 120 |
| accagttgaa | tttctcaaga | gcttccgttg | ttcaattttg | agcgtctcga | tatgtgattt | 180 |
| gcctgaatcc | gacatccgtg | tgaaaaggta | tgccccctga | atttttcacg | agctttc | 237 |
| <210> <211> <212> <213> | 5419 533 DNA Glycine max | ĸ | | | | |
| <400> | 5419 | | | | | |
| agcttgctcg | tcttgctgat | atttatcatg | cagacttttc | tgatgatgac | cgaggaacaa | 60 |
| ttagggatca | acttgaaact | tatgtgcttc | aagtgagaag | aaatgcttct | ttttccactt | 120 |
| gtgaagatgt | tcaaagtttg | gctatgaaga | tgggtcaaac | tgagaaacat | ttggtatttc | 180 |
| cattggttta | taaacttatt | gagctagctt | tgatattgcg | gtgtcgacag | catccgttga | 240 |
| aagagctttt | tcagcaatga | agattatcaa | gtctaaattg | cgcaataaga | tcaacgatgt | 300 |

| gtggttcaat | gacttgatgg | tatgttacac | cgagcgggag | atatttaagt | cgcttgatga | 360 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tattgatatt | attcgaacat | ttacccgcaa | aaagtctcgg | aaaggacact | tgcctcgtaa | 420 |
| ttttatttaa | cccgctattg | aagagtatgt | ttatctcttt | tattttaaac | tatatctttg | 480 |
| ttgacaaaat | gacgagtctc | ttttattttg | aatgattact | atctacatat | tat | 533 |
| <210> <211> <212> <213> | 5420 508 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| taggtaaaca | tcataatcct | ctaggactaa | cacgattaaa | gtagggaatc | ttaaaaaaaa | 60 |
| gtaacaacaa | gtagtttatg | caatgactac | acagattcat | cacacatcag | tgcaattatc | 120 |
| tcaatatttg | ttctttgttt | ccttggtttg | cgcagaaggg | caaggatttc | atctggagaa | 180 |
| cacccaaagg | ttgcatttaa | ctcaatcgga | cccttgatac | taaattacga | atagatgaaa | 240 |
| aatattttc | ctacatcatc | gtcgtgtttg | agctccatac | agtcatatgc | aacacaacca | 300 |
| tcacctatat | agattggtta | acagtaaaaa | aagatttatt | aaaattctac | aaccttcatt | 360 |
| gtgtcaaaaa | ttattttcct | taaggcagca | aacaagatgt | cctcacttat | tgtgatgact | 420 |
| ttangatcac | tanggctttc | aaacactatt | cctttatctg | atggaaataa | tgtcacatca | 480 |
| taatgcacaa | aagcggatac | actcttca | | | | 508 |
| <210> <211> <212> <213> | 5421 349 DNA Glycine max | × | | | | |
| <400> | 5421 | | | | | |
| agcttataat | atatcgatac | gctcgaaatt | aaacatcggg | aactctcgag | aaattcaatt | 60 |
| tgtcatcatt | tttcacacgg | atgtccgatt | cgggcgcata | atatgtcgag | aggctctaaa | 120 |
| ttgaacaacg | gaagctcttg | agaaattcaa | ctggtataac | ttttcacacc | gatgtccgaa | 180 |
| ttaggcaaat | cacatatcga | gacgctcaaa | attgaacaac | ggaagctcct | aaaaaattga | 240 |
| aatggtcata | acttttcact | ctaaagtcca | attcatgcgt | atcacctata | gggacactcg | 300 |
| gaattgaaca | acggaagctc | tcccgaaatt | caaatggtca | taacttttc | | 349 |
| | • | | | | | |

| <210> <211> <212> <213> | 5422 286 DNA Glycine max | ς. | | | | |
|----------------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| <400> | 5422 | | | | | |
| cgaatcagac | atccgtgtga | aaagttatga | ccatatgaat | atctccagag | ctaccgttgt | 60 |
| tcaatttcca | gcgtctcgat | atgtgatttg | cctgattcgg | acctccttgt | gaagagatct | 120 |
| gagcatttac | atttgacgag | agctttcgtt | gttgaacttt | cagcgtctcg | atatgagatt | 180 |
| ggcttgaatc | ggacatccgt | ttgaaaactt | acgaccattt | gaatttctcc | agaactatct | 240 |
| ggtgagaatt | tccagcgtct | ggacatatta | tgtgcccgaa | tcggat | | 286 |
| <210> <211> <212> <213> | 5423 1044 DNA Glycine max | ĸ. | | | | |
| <223> <400> | unsure at a 5423 | all n locat: | ions | | | |
| aaaataacgt | gattactcac | aacttgcacc | acaacttcct | cctcaactat | tctccgctag | 60 |
| tatatgtaat | gtctaatatc | tccancacan | aacctccaac | caaccaagat | gaaaattgat | 120 |
| tgcatcgcat | tccactccga | aactcaccga | gacacctctt | gaagcgatct | cgcacgcatg | 180 |
| acaaaataaa | tgagtctatg | agatatatta | tctcataaat | ctctaaaaca | acacccaggg | 240 |
| gtaggggtac | tgtattctaa | ttaaacacta | caacagttaa | tctttaacta | aaatctgcaa | 300 |
| gaattctcaa | tccaatactg | tatctatatt | gcacacacaa | agcgggggtt | gaacttctta | 360 |
| taactccgga | aaaaagattc | tcctctcgaa | taattcaaac | tagcttggtg | tcttctaacg | 420 |
| ttaaatgaat | tacttctaaa | aagcgtgtac | aaaattcaat | taacttaatc | gcaattcgaa | 480 |
| actacaacat | acacgcggcc | ctggtactta | gacgtaatcg | gcgccaaacc | caactaccta | 540 |
| cgcatggctt | acaacgcaat | cttacattag | aagcaaacta | tttaaaatac | ctccctaata | 600 |
| agcgttaagc | aatttagaaa | tttctccact | atatatttaa | tacctttcat | atatcaccct | 660 |
| aaaaacaaaa | caactctgtc | actaacaaaa | aattttataa | gccatacaca | tgcaaaattt | 720 |
| tcttttataa | aaaacacaag | gccaccgcaa | caataagtta | cataacaaac | ttgatatctt | 780 |



<210> 5425 <211> 197

| <212> <213> | DNA Glycine max | • | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5425 | | | | | |
| agcttcaccg | gatgatgccg | atcgaacatt | tcctaatcga | catcatccaa | ttgttattca | 60 |
| gggattgaat | aaaataaaca | atggccgggg | tccgtcgtta | tatggccccg | actgatatct | 120 |
| ttcagccgac | attgcgcaat | ttcttttaca | aacgctggcc | gataatgttt | ttttatttac | 180 |
| ggtagaggaa | gtttttt | | | | | 197 |
| <210> <211> <212> <213> | 5426 345 DNA Glycine max | ς | | | · | |
| <400> | 5426 | | | | | |
| agcatctcaa | tatgtgatgt | gcctgaatcg | gacctctgtg | agaaaagata | tgaccattag | 60 |
| aatatgtgga | catcttctga | agttcaagtg | atagagtgtc | tcaatatgag | atgtgcctaa | 120 |
| atccgacctc | cgagtgaaaa | tctatgacaa | tttgaatttc | tcagaatctt | acgctggtca | 180 |
| ataaagagcg | tccccatatg | tgatgtgcct | gaatccgact | accctgtgaa | aacttatgac | 240 |
| cattttgaat | ttctccaaaa | gaatttgtcc | ggccatatgg | agcatccatg | atatattagt | 300 |
| gcgactgatt | cccacattcg | atggaaaagt | tatgaacttt | taaat | | 345 |
| <210> <211> <212> <213> | 5427 443 DNA Glycine max | × | | | | |
| <400> | 5427 | | | | | |
| agcttctggt | gggacatctt | gacttgcttt | ccaatctgac | attcaccaca | gattctgcct | 60 |
| tcttctattt | tcagattggg | aatgcctcta | atagcacctt | tgtcaatgat | tttcttcatg | 120 |
| cctcttaagt | gcagatatcc | aaatctttga | tgccatattc | tgacttcatc | ttctttggag | 180 |
| gatagacatg | tggaggagta | actggtttct | tgaggtgtcc | ataggtagca | gttgtccttt | 240 |
| gatctgctgc | ccttcattag | aacttcacac | ttctcatttg | tcactaagca | ttctgacttt | 300 |
| gtgaagttta | cattgaatcc | ttcatcacac | agctgactga | tgctgatcaa | agttgcagtc | 360 |
| agtcccttca | ccaacaggac | tttgtccaga | ctaagaaagt | catcatggac | tatacttccc | 420 |
| | | | | | | |

| attccagaga | tcttttcttt | aaa | | | | 443 |
|---|--|--|--|--|---|---------------------------------|
| <210> <211> <212> <213> | 5428 466 DNA Glycine max | . | | · | | |
| <400> | 5428 | | | | | |
| tttcgattca | ttctatgtac | ccgtggtggt | ccacattgtg | tttcgcgtat | ttttattctc | 60 |
| gtttcattta | ctttttatac | ccccttttga | cgtgcttaag | ccatcttatt | taagtcattt | 120 |
| ctcgcttaaa | ctaaaaataa | aataaatttc | caccgatcgt | ttgaattgta | ttatccgtta | 180 |
| acttcggtta | aaatgaattc | cgaccgttcg | gttgtgccgt | aaccacgttg | gaaattaaaa | 240 |
| aaaaaaaaga | ggtaaaaaat | aatataataa | taaaaaaaca | tctttttagt | aaaataaagc | 300 |
| ggaaaatcaa | tcggacgttt | tctctttggg | atttctcatt | cttaaccgaa | ttgactaata | 360 |
| actaaagtga | aactaaggct | aaaatcaact | ctcctagtca | agctcgtcca | taaaaatagg | 420 |
| gtttttgaag | tttgtcattt | caatttctta | cctaataaaa | tggatc | | 466 |
| | | | | | | |
| <210> <211> <212> <213> | 5429 477 DNA Glycine max | × | | | | |
| <211> <212> | 477 DNA | x | | | | |
| <211> <212> <213> <400> | 477 DNA Glycine max | | atcacacagc | agaaaactaa | caaaactacc | 60 |
| <211> <212> <213> <400> agctttcaac | 477 DNA Glycine max 5429 aaatgtcttc | acaaataatc | | | caaaactacc tccacccaaa | 60 |
| <211> <212> <213> <400> agctttcaac | 477 DNA Glycine max 5429 aaatgtcttc | acaaataatc catacccacg | aaaatcaaga | gggaaagaag | tccacccaaa | |
| <211> <212> <213> <400> agctttcaac cctcatatct | 477 DNA Glycine max 5429 aaatgtcttc cccaaaaccc | acaaataatc catacccacg ctcgtagcca | aaaatcaaga cgcactttac | gggaaagaag gactccaaaa | tccacccaaa | 120 |
| <211> <212> <213> <400> agctttcaac cctcatatct cctgaaattt ttcacgattt | 477 DNA Glycine max 5429 aaatgtcttc cccaaaaccc cgaagtccca | acaaataatc catacccacg ctcgtagcca tggtggccaa | aaaatcaaga cgcactttac aggttgaagc | gggaaagaag gactccaaaa tttgcttgaa | tccacccaaa atgctctcct gcttcaatgg | 120 180 |
| <211> <212> <213> <400> agctttcaac cctcatatct cctgaaattt ttcacgattt agaatgaaga | 477 DNA Glycine max 5429 aaatgtcttc cccaaaaccc cgaagtccca ggggcagaaa | acaaataatc catacccacg ctcgtagcca tggtggccaa tacgtgagag | aaaatcaaga cgcactttac aggttgaagc agggagagaa | gggaaagaag gactccaaaa tttgcttgaa aaggcttctg | tccacccaaa atgctctcct gcttcaatgg aatttctgct | 120 180 240 |
| <211> <212> <213> <400> agctttcaac cctcatatct cctgaaattt ttcacgattt agaatgaaga ttggctgagt | 477 DNA Glycine max 5429 aaatgtcttc cccaaaaccc cgaagtccca ggggcagaaa agaagaaagc | acaaataatc catacccacg ctcgtagcca tggtggccaa tacgtgagag aaaagctttt | aaaatcaaga cgcactttac aggttgaagc agggagagaa tggttttaaa | gggaaagaag gactccaaaa tttgcttgaa aaggcttctg aaaaaataag | tccacccaaa atgctctcct gcttcaatgg aatttctgct aaggggtttc | 120 180 240 300 |
| <211> <212> <213> <400> agctttcaac cctcatatct cctgaaattt ttcacgattt agaatgaaga ttggctgagt ccttttttt | 477 DNA Glycine max 5429 aaatgtcttc cccaaaaccc cgaagtccca ggggcagaaa agaagaaagc gaggagagagag | acaaataatc catacccacg ctcgtagcca tggtggccaa tacgtgagag aaaagctttt attcaagctc | aaaatcaaga cgcactttac aggttgaagc agggagagaa tggttttaaa tgccacatgt | gggaaagaag gactccaaaa tttgcttgaa aaggcttctg aaaaaataag cccttattga | tccacccaaa atgctctcct gcttcaatgg aatttctgct aaggggtttc ttggagcaaa | 120 180 240 300 360 |

| <212> <213> | DNA Glycine max | ζ. | | | | |
|---|--|---|--|--|--|---|
| <223> <400> | unsure at a 5430 | ıll n locati | ons | | | |
| tcactgaata | gcttgtgtta | ttgaagaata | ttcttcttga | atagaacacg | ttacccaaaa | 60 |
| atcagtacga | ggcaaataag | atattatgtc | ttgcacatat | ggagtaccaa | aaaatacatg | 120 |
| catgccctaa | taattacatt | ttgtatagaa | atcagtttgt | cgaaacacac | aaatacccca | 180 |
| caagtgggta | tcacagtaca | aattgaagga | taacacatgt | agtgatgatg | caacgaaaaa | 240 |
| caacaactat | ttagcaaagg | tgtgctaata | tctttcaatt | attccaaggt | tgcagtgatt | 300 |
| gttttctaat | ggacatgata | caaaaaaact | taacatggca | tgcagctggt | agaaaaagtg | 360 |
| atggattgct | ccaacatccc | gttgattatc | cctaatagaa | gacaattgat | catttgtatc | 420 |
| ctanatttgc | ataggaccta | tganacctaa | ggcttggtct | tgcttcagct | ggaatgaatc | 480 |
| atgttggtaa | cttaagcacc | aaccataatt | catggcatgt | t | | 521 |
| 21.0 | E 4 2 1 | | | | | |
| <210> <211> | 5431 798 | | | | | |
| 72117 | 750 | | | | | |
| <212> <213> | DNA Glycine max | ζ | | | | |
| <212> | DNA Glycine max | | ions | | | |
| <212> <213> | DNA Glycine max | all n locati | ions | | | |
| <212> <213> <223> <400> | DNA Glycine max unsure at a 5431 | all n locati | | ctctgcaggc | atgctaccgc | 60 |
| <212> <213> <223> <400> gaaanatgan | DNA Glycine max unsure at a 5431 accatgtcgt | all n locati | ctctgagatc | ctctgcaggc tgccatcatc | | 60 |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag | all n locati | ctctgagatc | | acgaggggac | |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta cgcatctgtt | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac | all n location accegngate tggcattata caacaatgtt | ctctgagatc acgcgctaac tttgaaaatc | tgccatcatc | acgaggggac gaaatgttgt | 120 |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta cgcatctgtt acactacgaa | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac cataactatt | accegngate tggcattata caacaatgtt gcacgacaga | ctctgagatc acgcgctaac tttgaaaatc tggaggtgtt | tgccatcatc | acgagggac gaaatgttgt gaaaaggatg | 120 180 |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta cgcatctgtt acactacgaa tgtaccacct | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac cataactatt gcaacattaa | accegngate tggcattata caacaatgtt gcacgacaga caggtcgggt | ctctgagatc acgcgctaac tttgaaaatc tggaggtgtt ttgggtttat | tgccatcatc aacagtgcat gggtcatctt | acgagggac gaaatgttgt gaaaaggatg ataagagaag | 120 180 240 |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta cgcatctgtt acactacgaa tgtaccacct agacattctc | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac cataactatt gcaacattaa tcccttatgt | accegngate tggcattata caacaatgtt gcacgacaga caggtcgggt tagtgcaatc | ctctgagatc acgcgctaac tttgaaaatc tggaggtgtt ttgggtttat acccttaata | tgccatcatc aacagtgcat gggtcatctt aaagtgagct | acgagggac gaaatgttgt gaaaaggatg ataagagaag atgatgtata | 120 180 240 300 |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta cgcatctgtt acactacgaa tgtaccacct agacattctc gtatcaacca | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac cataactatt gcaacattaa tcccttatgt ttttcgttgc | accegngate tggcattata caacaatgtt gcacgacaga caggtcgggt tagtgcaate gagttttact | ctctgagatc acgcgctaac tttgaaaatc tggaggtgtt ttgggtttat acccttaata gtattctgca | tgccatcatc aacagtgcat gggtcatctt aaagtgagct tccťagcgaa | acgagggac gaaatgttgt gaaaaggatg ataagagaag atgatgtata ttataaaatc | 120 180 240 300 360 |
| <212> <213> <223> <400> gaaanatgan gtgcgcccta cgcatctgtt acactacgaa tgtaccacct agacattctc gtatcaacca gccgtatttc | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac cataactatt gcaacattaa tcccttatgt ttttcgttgc gtgaagaata | accegngate tggcattata caacaatgtt gcacgacaga caggtegggt tagtgcaate gagtttact tgtgaattt | ctctgagatc acgcgctaac tttgaaaatc tggaggtgtt ttgggtttat acccttaata gtattctgca actataaatt | tgccatcatc aacagtgcat gggtcatctt aaagtgagct tccťagcgaa tagatgaagc | acgagggac gaaatgttgt gaaaaggatg ataagagaag atgatgtata ttataaaatc aatcatcccc | 120 180 240 300 360 420 |
| <212> <213> <223> <400> gaaanatgan gtgcgccta cgcatctgtt acactacgaa tgtaccacct agacattctc gtatcaacca gccgtatttc ttataagaat | DNA Glycine max unsure at a 5431 accatgtcgt tctgaatgag gcagttaaac cataactatt gcaacattaa tcccttatgt ttttcgttgc gtgaagaata actcttttt | accegngate tggcattata caacaatgtt gcacgacaga caggtcgggt tagtgcaatc gagtttact tgtgaattt | ctctgagatc acgcgctaac tttgaaaatc tggaggtgtt ttgggtttat acccttaata gtattctgca actataaatt ccattataag | tgccatcatc aacagtgcat gggtcatctt aaagtgagct tccťagcgaa tagatgaagc taagactatc | acgagggac gaaatgttgt gaaaaggatg ataagagaag atgatgtata ttataaaatc aatcatcccc tcttattcat | 120 180 240 300 360 420 480 |

<213>

Glycine max

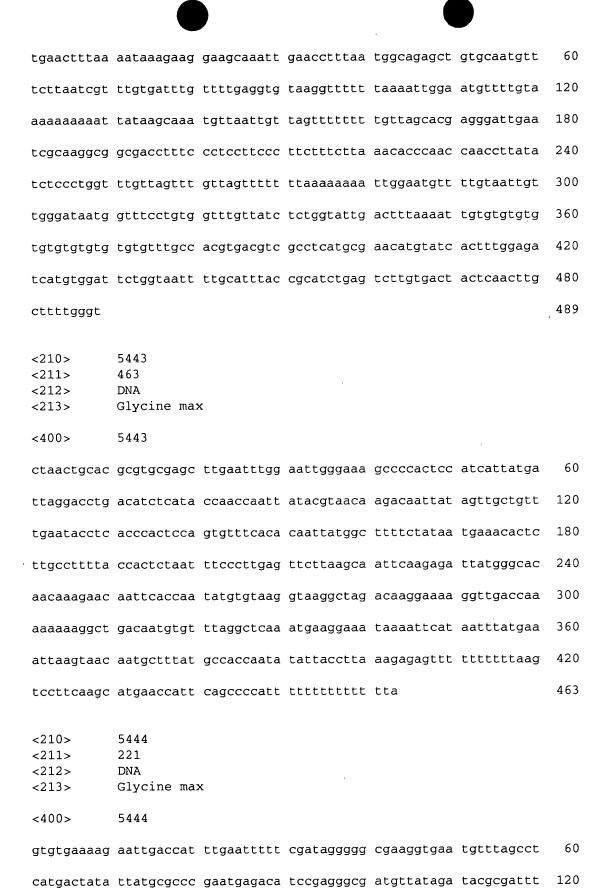
| cttttttgga | tacattttcc | gttgggggag | aactttaaac | cacatcaggg | ggggggtcgg | 720 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tttttacatg | gaagctacat | taaaagtgtt | gtaattgtat | accaccaaaa | tgcggctttg | 780 |
| ggggcccgtt | attttttg | | | | | 798 |
| <210> <211> <212> <213> | 5432 278 DNA Glycine max | c | | | | |
| <400> | 5432 | | | | | |
| tgccgcccag | ctcgcccatg | cgagctcata | ttacccaggc | gagccacgtt | gcttactaca | 60 |
| catgccacca | ccctctggag | gaatcttctg | gaaagcccat | gtgggcctcg | attgctattt | 120 |
| acacccctat | ttactaaatg | caccccctt | ttctattcct | ttgcgatcct | ttttccgaca | 180 |
| cgttaccaac | ttaatttttg | tcactgaata | aaattttgac | taattctcca | cagtgggaat | 240 |
| tttatgcccc | ttaaaaaaaa | taacaccatc | tcccattt | | | 278 |
| <210> <211> <212> <213> | 5433 475 DNA Glycine max | ĸ | | | | |
| <400> | 5433 | | | | | |
| catgggttaa | gcacaaggaa | gactctttaa | gaagatgagt | tgtacaggct | cgcttaacac | 60 |
| actgcttcat | cccactaagc | gcatcgcttc | agttcattag | ctaagcgaga | aaggcacgcg | 120 |
| cttagctcaa | attcactaat | atgcgctaca | cgatccataa | gtgcgttaag | cgcacgagca | 180 |
| cgaacaaggc | cacctattta | cacctgaaat | aagattttac | agagagagtt | tggactgcga | 240 |
| ttcacagctt | tgcatgtaga | gggtttctag | agagagaaca | atccatgttc | tataaagttt | 300 |
| tgagagaatt | gtgtgtgcga | taatctgcag | agaccatatc | ttgaagcacg | agccacgttt | 360 |
| agagetegag | atgagttttt | gagtgattgg | gagatcctag | agatgaaggg | gacatcctcc | 420 |
| ccacttgttt | tctgcaattt | ttcatcttgc | cctctcttc | ttggaagaac | gcttc | 475 |
| <210> <211> <212> | 5434 487 DNA | | · | | | |

| <400> | 5434 | | | | | |
|----------------|-------------|--------------|------------|------------|------------|-----|
| cccgagagca | tctgtattta | agcacttcag | ccttagcttt | tctgtagctt | atgaaaaacg | 60 |
| tcaattcttc | ttctttcttt | ctttcaaagc | catttctaaa | gttccaagca | ctttctccat | 120 |
| cacccacagc | caccattagc | aaccacaaac | catcattgtt | ctccattgaa | aacccacacc | 180 |
| gagaggaacc | cttcaaccga | agcggaatct | tccaacttgg | cttgcggttc | cggtagagaa | 240 |
| cgaaaaccct | aatctgacct | ttcaaggtaa | ccatgggtct | atgcttattt | cttgttaggt | 300 |
| ccatattgtc | tttgcatctt | ttctgccttt | ggaaccgcca | ttgcatgtct | tatgcttcct | 360 |
| ttgaaaaacc | ttagagaaat | agactttggt | aacgttatac | tttcatgaaa | tgcatgttat | 420 |
| tttcgtaaac | aacactgaac | ccccggcaaa | ttggcgtggg | gcggaatttc | aaatgacgtt | 480 |
| cctttgt | | | | | | 487 |
| | | | | | | |
| <210> <211> | 5435 566 | | | | | |
| <211> <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| | | | | | | |
| <223> | | all n locat: | ions | | | |
| <400> | 5435 | | | | | |
| agcttgtgtg | cctcatcaat | aggagttgca | tttttaggtg | ctaacggaca | aaatcacaaa | 60 |
| atacccacat | ttgttgcggt | taagccaata | aggtttttga | attaaagctg | tgaaaagaag | 120 |
| gttgtacact | tgaacaaact | atgtatgttt | aatggattgt | ttggtctctt | gaaaaggatg | 180 |
| tgtaccactg | aaaaacattt | gaagggtcag | tgtagtgggt | ttataatgtg | agctatttga | 240 |
| gaagtgtcgt | tctctccctt | atttttgtgc | agtcaccctt | aatattataa | cgaaatttgt | 300 |
| ttaaatataa | accatttttg | ttaaggatat | gtacttttt | ctgtaaaaaa | aatgcttaaa | 360 |
| ttatgttagt | atttcctgaa | atatatttga | attttattat | tattttttga | taaatttttt | 420 |
| ctttatttt | tgcttcctaa | tatttgaaaa | aggtcccatt | antagccatt | aaatgtctaa | 480 |
| tacatgaatg | tctttattaa | taaattaaaa | aaanattttt | tatattttt | cttcttttc | 540 |
| cgatcatcct | tcatttttt | tctttc | | | | 566 |
| | | | | | | |
| <210> | 5436 | | | | | |
| <211> | 481 | | | | | |
| <212> | DNA | | | | | |

| <213> | Glycine max | ζ | | | | |
|-------------------------|-----------------------------------|--------------|------------|--------------------------|------------|-----|
| <223> <400> | unsure at a | all n locati | ons | | | |
| tgagcaagat | ttgttgaacg | gggaagcaag | atatgacaca | aaatatagtg | catgatacga | 60 |
| cattcaaaag | tgaatgaacc | aacaagcaat | tgaccagaca | tataagcatt | ttcagtgcaa | 120 |
| accattttgt | gggcatcatg | atttgaataa | atatgcttcc | agtcatcaac | caaagcgccc | 180 |
| tcaaaaggta | caccttgact | actcaatttt | gtcaatgaat | aaaataagga | ctaatcaacc | 240 |
| acaatgggaa | ttttatgcac | ctcagaaaag | ataacaccat | ctcgaatttc | agattattat | 300 |
| aaaaaacata | gactaattca | gaatagtatg | acattttgag | agtcataaaa | tcgattaatt | 360 |
| cagaattttg | aaagacttga | tggtaatcaa | aagtctctcc | ttcaaagaat | tntaagtcta | 420 |
| aatatttggg | atcaagaatg | actcgattgg | anaatgagga | atagtacctt | tgacgttgat | 480 |
| С | | | | | | 481 |
| <210> <211> <212> <213> | 5437 488 DNA Glycine max | × | | | | |
| <400> | 5437 | | | | | |
| agcttctata | taagctgaac | cattttatca | ataaagacaa | gttgagtttt | attcagaaaa | 60 |
| ttagagttta | tctcttttat | cttagtgaga | gtgattctcc | taaattcttg | agtgattcaa | 120 |
| gaacaccttg | gctgtatcaa | aggactttca | caacctttgt | gtgttgccct | tgctggaaag | 180 |
| agtgaatctt | tccttccttt | catcatcacc | cttgttcttt | caaaccacaa | ttccagaaaa | 240 |
| tccacctctg | cccagaatta | tctcgtggcc | ataactccca | ttttacgcac | tcaaattaag | 300 |
| tgattcttga | gcctaaattg | aatttcaaaa | cgagaccttt | cacctcgttt | tggaatcacc | 360 |
| | | | | | | 400 |
| tcatttggag | ccctgtagct | tcagttattg | ccatttctat | atttctgtcc | agccaccact | 420 |
| | | | | atttctgtcc agaaccacct | | 480 |
| | | | | | | |

| <223> <400> | unsure at a 5438 | ll n locati | ions | | | |
|-------------------------------------|--|-------------|------------|------------|------------|-----|
| ntntggagta | gaaacatggg | accaactcat | tttatttcaa | aaagtcgtat | ctagtcaagg | 60 |
| tctgagagac | cgtacaagtt | tcctagcgat | ttctaattat | gtgggtcatt | aagtctatca | 120 |
| tatgctgaca | atagctgaga | agcccgtgaa | tttcttcggg | ggcggagtag | gtgtctgcca | 180 |
| tcgccttggc | cttggctaac | aatcggggaa | gttcttgact | cctgttcaag | gtaagagcaa | 240 |
| accgatccat | ccacatggtt | gcctcttggt | gtaaagagtc | gatcaccctt | cctctagcct | 300 |
| ctttttccgc | gtatacttgg | gcatactcgt | ccgcgaccct | atgctcgtgg | gccgtggcta | 360 |
| gacctaactc | ttcttggtac | ttggcgatga | tagctagcat | gttggtctct | gtctcgcata | 420 |
| aacgctg | | | | | | 427 |
| <210> <211> <212> <213> <223> <400> | 5439 544 DNA Glycine max unsure at a 5439 | | ions | * | | |
| agctttgaaa | agtgttgttt | ttcaccttct | cgctaagcca | atctgctggc | ttagcgagcg | 60 |
| tctgctaagc | gcaacactca | tgggttaagc | acaaggaaga | ctctagaaga | agatgagttg | 120 |
| tacaggttcg | ctaagcacac | tgcttcatcc | cactaagcgc | atcgcttcag | ttcattagct | 180 |
| aagcgagaaa | ggcacgcgct | tagccgaaat | tcactaatat | gcgctaagcg | atccataagt | 240 |
| gcgttaagcg | cacgagcacg | aacaaggcca | cctatttaaa | cctgaaataa | gattttagag | 300 |
| agagagtttg | gactgggatt | caaagctttg | catgtagagg | gtttctagag | agagaacagt | 360 |
| ccatgttcta | gagagttttg | agagaaatgg | ctgtgtgata | atctgcaaag | accatagctt | 420 |
| gaagcaggag | ccagttntag | agcttgagat | gagtttatga | gtgattgtga | gatcctanag | 480 |
| atgagggaga | catnctcacc | acttgtattt | ttgcaatctt | tcatcttggt | cttctctttc | 540 |
| ttga | | | | | | 544 |
| <210> <211> <212> <213> | 5440 457 DNA Glycine max | ı. | | | | |

| <400> | 5440 | | | | | |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tccgttcccg | agagcatctc | ttatttaagc | acttcagcct | tagctttcct | gtagcttagg | 60 |
| aaaaacgtca | tttcttcttc | tttctttctt | ccaaagccat | ttctaaagtt | ccaagcactt | 120 |
| tctccatcac | ccacagccac | cattagcaac | cacaaaccat | cattgttctc | cattgaaaac | 180 |
| ccacaccgag | aggaaccctt | caaccgaagc | ggaatcttcc | aacttggctt | gcggttccgg | 240 |
| tagagaacga | aaaccctaat | ctgacctttc | aaggtaacca | tggttctatg | cttatttctt | 300 |
| gttagtttca | tattgtcttt | gcatcttttc | tgcctttgga | accgccattg | catgtcttat | 360 |
| gcttcctttg | aaaaacctta | gagaaataga | ctttgtaaac | gttatccttt | catgaaatgc | 420 |
| atgttatttt | cgtaacctac | actgaacccc | ggtcaca | | | 457 |
| <210> <211> <212> <213> | 5441 536 DNA Glycine max | κ. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttttatc | ttgcgaaaaa | tcataaaacc | caaaaaaagt | gggacaccag | agaaggctga | 60 |
| ggttcacaaa | aaaatttaag | cttttgtatt | gggagaaata | aagaaacaaa | caaaatgtag | 120 |
| tcagagaatc | aaagaaaaca | aacttgtttg | agataaaaat | cgaagctttt | tgtagattag | 180 |
| tgtcttgttc | caccttctct | gcatacaata | gcaaaggtat | tgtgagaagt | cagaaaataa | 240 |
| aataaaaaaa | attaaacttt | ttgtagtgcg | agaacttaga | aaacaaaata | aaggaagaac | 300 |
| acctaaaaaa | ttaaagcttt | tgtcttgtga | aaaatcataa | aaccccaaaa | aaatgggtat | 360 |
| aagaaagaat | gaacacattt | gagaaggctg | acgaaaacga | naaaatttaa | ccctaaacca | 420 |
| aaaaacaaa | gaaaatgaac | ccatactcgt | ggagttttca | aataaaaact | gcagttgtag | 480 |
| tctgctctcc | acctcctctg | catgcaatag | aggttgacta | aaaaaatgta | agcttt | 536 |
| <210> <211> <212> <213> <400> | 5442 489 DNA Glycine mas | × | | | | |
| ヘエリリ ア | ンママム | | | | | |



37

| cttctagaac | ttttgagagt | gctttccagc | ctaagcacat | gttttccacc | cgcttgggac | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ccacccttgc | cattgaacga | caagttttgt | agagatgcag | С | | 221 |
| <210> <211> <212> <213> | 5445 805 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tgcnccgtga | anattggtgc | gtctagaccc | gcgaccctat | cattgaaccg | ccggcggcat | 60 |
| gcaatctagt | aagccctcgt | gccctgactt | tgttgtcttg | gctgttgttg | ctaaaatatt | 120 |
| gagggtggac | ctgcttttgg | gttgagaagc | aaagtctata | ctgtttgggg | gaggaaagaa | 180 |
| tctccatttt | tccactctag | gactttctga | acctttgaga | ggtcacttta | cacagcatag | 240 |
| ttgctcttgc | ctatcaccca | agagtcctgc | ctttcctttt | aatggagggg | cagtttattt | 300 |
| gcgatccaca | tcacttctaa | tttgtgcact | cctcccctta | aaacccttcg | atttagtgcc | 360 |
| tttcgttccg | agatcctctt | tcttaatcat | tccttttctc | taaggtagtc | attccttgaa | 420 |
| catgagetee | ttccttcaca | tattgccatt | ggactacgtg | ggagcaaatt | cctagggttc | 480 |
| cattcagcac | ccccctcatg | gatcaagagg | gcccttttaa | tgcgctgtcc | tctcatcaca | 540 |
| aaatattccc | ttctgttgct | tcaaccgttg | aatcctttcc | tcctgaaggt | tgcatgctgg | 600 |
| ccataatttg | aggagatgaa | tcatttcctt | caatcctaag | cgggggagga | cgaatccctt | 660 |
| aactaatttt | gttccctact | cctttcacaa | ggttccttct | ttgacagtat | gtggaactat | 720 |
| acgttccatg | gatcccgcac | catgttcttc | ctgctgggcg | aaacttttat | tcctttgttg | 780 |
| gaagaactcg | gcgttttctc | tctct | | | | 805 |
| <210> <211> <212> <213> | 5446 414 DNA Glycine max | x | | | | |
| <400> | 5446 | | | | | |
| tgaagaggat | gctctaatgg | aggaaaagaa | agagagaagg | gggggagcac | gaaagtgaag | 60 |
| gaataaaaga | gggaaataag | tggaactttg | aagtgtatct | cataagactt | tcattcatca | 120 |
| aagttacaac | aattgttaca | catgcttcta | tttatagact | aggtagcttg | cttgagaagc | 180 |

<400>

5448

| tctcttgaga | aaacttcatt | gagaagcttc | tttgagaaaa | cttccttgag | aagctagagc | 240 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| ttagctacac | acacccctct | cataactaag | ctcacctcct | tgagaagctt | ccttaagaag | 300 |
| attcctaaag | aagctagagc | ttatctacac | atacctcttt | aatagctaag | ctcacctcct | 360 |
| tgagatgaga | agcttgaact | tagctacaca | cccctataa | gctaaactca | cccc | 414 |
| <210> <211> <212> <213> | 5447 819 DNA Glycine max | k all n locat; | ions | | | |
| <400> | 5447 | | | | | |
| ntgattgaga | accatgttat | nacctacact | atacaatact | ctatcttgca | tgccagctgg | 60 |
| gcgactctat | aggaaacccg | ggtacctttc | tctaattcac | gccatagaga | atcggataac | 120 |
| cattcacagg | ggcgttgaat | accacgtacg | agactgggcc | aatcctgacg | atagccactc | 180 |
| ttaacgccca | aggattacat | gcccctctca | acaggtggcc | gtcttcctaa | taggcccgga | 240 |
| ccgaactatc | tttccgactt | gtgttcagcc | ctaatggata | aaggcacctg | acgcggggtt | 300 |
| ttgtccttac | tcgtggaagg | agttgttgac | accgtcctct | agccccttct | tagtacaata | 360 |
| ctattgtgat | gcccgatatg | caaatcgatt | ctcgacaacc | gccaataccg | cttacgcaaa | 420 |
| ttgcatttgg | gcataataaa | gtacatattg | ggctctaatt | cgcaataccc | cctcttttac | 480 |
| tattttataa | acaattttca | tgttgggaca | ccatttttt | aacccatttt | ttacaattat | 540 |
| aaggcccccc | tccattcctt | tagcggctaa | caagaacttt | taattccccc | ccatcttccg | 600 |
| aaaaacattt | taaaataaaa | cattttcttt | tcaccaccat | ttgtttccaa | caaaggaagg | 660 |
| ttgccctcgg | accaggggaa | atcacacttt | ctcccacacc | ctttggcgga | aacggaataa | 720 |
| attcatataa | acaatatggt | tggggggata | ccgttaacca | atattctttt | ttaaatatga | 780 |
| ataaactttt | ctcaataaaa | cccgaaactc | tctctttcg | | | 819 |
| <210> <211> <212> <213> | 5448 395 DNA Glycine max | x | | | | |

| agctctaact | tgttttctat | taagctcatt | ttaacacatc | cacaagtttt | gaggtagatt | 60 |
|-------------------------------|---|------------|------------|------------|------------|-----|
| tttttttat | agaaaattgt | gttaagctta | tttggataat | ctcgggctaa | aaccttactt | 120 |
| tactaaactt | agagccaatt | taagactgtg | ttagacgatc | tttaatttga | tcaatttcaa | 180 |
| gcgctatgcc | ttggctgttc | ttgaaaaggt | gtcttatttg | acaaaaggtt | taaagttttc | 240 |
| actaacaaca | ttattcaact | caggccttct | agtatgtcct | atatattgta | gatcactaac | 300 |
| tatgatgcag | gtactaaagc | ctacaaatta | tatacattta | acaatgggaa | gattgctgtg | 360 |
| aatgaaaatg | ttttagttgg | ggaagaaagc | ctaca | | | 395 |
| <210> <211> <212> <213> <400> | 5449 360 DNA Glycine max 5449 | ς | | | | |
| tattacaaga | atatccgatc | atatttaaca | agctgtggct | tattaacaag | cctggtgcct | 60 |
| taagtcctac | attggcttct | tcctctctta | ttaaacatgg | gcggtcacaa | atcccctacc | 120 |
| tggtaacaga | ttttggcttt | tatctgtcgt | ggattcacct | ttttactgcc | aagggaggca | 180 |
| tactaataca | aattctacat | tctcttttac | ctcctagaaa | acacggaaca | actcggatcc | 240 |
| gcctctgtac | aagtacgtgt | tacaatctgc | agggtgaagg | ataaaagata | aataggctgg | 300 |
| tttcatctta | ctggttcccc | atcataccca | cttttggttc | aatattttt | agatctaaaa | 360 |
| <210> <211> <212> <213> | 5450 370 DNA Glycine max | × | | | | |
| <400> | 5450 | | | | | |
| | acaagcaata | | | | | 60 |
| | taagcttgta | | | | - ** | 120 |
| | tgatatttac | · | | | | 180 |
| | | | | | tattaagagg | 240 |
| taccgggcgt | gccctttcga | tcaaggagaa | attgaatgag | ttatagatga | atgttgtcat | 300 |
| | | | | | | |

ctaatatgca tataaggagc ataagaatgt aaggccttta ctaaagcaaa cactttatat 360

| tggctttact | | | | | | 370 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5451 486 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 5451 | ll n locati | lons | | | |
| tcttagaatc | agtcattcat | ttggcttgaa | gctagtcatg | gcaatgacaa | aatcaaatag | 60 |
| gagatttaga | acctacaatt | ctgatttagg | aaagataaca | atcgactacg | acacatttgt | 120 |
| gagcttcgac | tcaaaagata | tcaacaaaga | gaaaaacatg | actatgctaa | ggattaacga | 180 |
| aaggagcaaa | gtgatggatg | attgatcaga | agcactactg | gatccagata | accccaaata | 240 |
| tacggctgca | cttcaactgc | ataaagtata | caaaagcttt | cgtacaagaa | caaagctagc | 300 |
| agattataca | attcttattg | aacaaagctg | gtactttatt | tattgtaatg | agaacctctg | 360 |
| tccttcttta | ctaaactctc | catgagttnt | aattttatct | tttggtttta | atacatatgt | 420 |
| agaagctctt | acattntgcc | gaactcaagc | acaactctat | atctttcttt | cacattgaga | 480 |
| aacatg | | | | | | 486 |
| <210> <211> <212> <213> | 5452 234 DNA Glycine max | | | | | |
| <400> | 5452 | | | | | |
| tgacatttaa | tctatgaatc | gaagacaatc | atacatctaa | aattatggtt | ggacatgcgt | 60 |
| aaagctcatt | acttattcaa | acttcaaaac | aacacatggg | ataaccattg | tggcatttca | 120 |
| tcaaacagtt | ggtgtgcgca | tgttaaaaca | cgtttaaatg | acggatgatg | agccatttga | 180 |
| catgcaaatt | tacaaaaaaa | acaaggatag | gtctacagcc | acccatttgg | gcca | 234 |
| <210> <211> <212> <213> | 5453 451 DNA Glycine max | ĸ | | | | |
| <400> | 5453 | | | | | |
| togaacatat | aaactgaatc | ctaggccccc | ttaaggactt | aatcaaaata | tttgctggct | 60 |

| gatcattaga | attaatgaac | tcagtgataa | tttctttgga | cagtagcttc | cccgaataaa | 120 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gtgacagtca | atctctatgt | gcttgagcct | ctcatggaag | actgggtttg | aagcaatgtg | 180 |
| aagagcagcc | tgattatcgt | agtataactt | catttgcacc | actctgcaga | atttcaactc | 240 |
| ttcaagaatt | tgtttaccca | cataagttcg | catgtaacca | tacccataga | tctgtattca | 300 |
| gcctttgcac | tagatcgagc | aacaacaatt | cgcttcttgc | ttttgcaaga | aataatattt | 360 |
| cctcgaatgg | agacagacac | aatatcctga | tgtggatctc | ctatccatgg | gatatccaac | 420 |
| ccagtgtgca | tcacagtacc | cacatatttg | t | | | 451 |
| | 5454 459 DNA Glycine max | x | | | | |
| <400> | 5454 | | | | | |
| agcttccaca | acatccaagc | aaaacaacat | tcagacagca | caagctatca | cagccaagcc | 60 |
| aaacagagca | aaggccgaaa | actctgccac | aacaccaacc | aaatcacagc | ttttctcact | 120 |
| taaagacccc | agtaacaatt | cctacgatcc | aattcgttaa | ccgttggatc | gactccaaaa | 180 |
| ttttactgga | agtatatagt | acatgagcct | acattgtgac | cgctgggatc | tactatcaaa | 240 |
| catccacaac | tcattctgca | ctactctttc | cacagccaac | cacacacaag | catttttctg | 300 |
| cacaaagcca | aaattctgct | gcacctattg | tgacagcaaa | attctgcgta | agtgcagatt | 360 |
| tcgaaaatca | cactttctct | catccaatct | tgcccaaatc | aattcctaca | agtcccaaat | 420 |
| catgtatcaa | tcatgtctaa | accaaagtca | agctttaca | | | 459 |
| <210> <211> <212> <213> | 5455 419 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tgcttcattt | tctcctcaag | tctagttctt | tcgttcttag | tgtccgcctt | caatttggtt | 60 |
| aagccaattt | cactggcatg | gaatttcttt | tatgatgtat | gcccattcga | gaagattgaa | 120 |
| ttaaatgcgt | ccaaggttta | tttgtcattc | tcaagcatat | accatcttca | tatttgtcta | 180 |

| | | | | | • | |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| attcctcaca | tatctctttg | atttgttttc | gaacatcagg | aatagaaaga | actgacttga | 240 |
| ggtcttgatt | gtcttggagg | aaggtagtgt | gaaattgttc | ccaaaccttt | tgatattcag | 300 |
| aaagattgtc | aagttgattt | gcacttggtt | ttgaagcaac | tccattttct | tcttcatgac | 360 |
| tnttccattg | gtgcataata | gtgttatcat | cgtcatcaaa | ttcgaacatg | ctactctct | 419 |
| <210> <211> <212> <213> <223> <400> | 5456 521 DNA Glycine max unsure at a 5456 | K all n locati | ions | | | |
| agcttgccca | gagaaggagt | ccacggagga | aatgcttacc | acctcaaaag | actggaaagc | 60 |
| ggtttctaat | gactcctcta | cggcttccac | ataaggcata | gaggatgggc | agctcaccaa | 120 |
| gatgtcttcc | tcgcctgata | cgatgaccag | atgcccttcc | actacgaatt | tcaacttttg | 180 |
| gtcgagtgtt | gagggaacaa | ctcctactga | gtggatccac | gggcgcccca | acagacagct | 240 |
| gtagggggg | ttaatatcca | ttatttggaa | ggtaacttga | caggtgtgag | ggcctatctg | 300 |
| tactgggaga | tcgatctctc | ccctaacctc | ttggcgggtg | tcgtcgaagg | cacgaaccac | 360 |
| cattgaactc | ggctttaagt | gggaagcatt | gaatggtaat | ttctccaaag | tgctcttatg | 420 |
| catcacgttt | aaactggaac | cattatcgat | gagcactttt | gctacgatat | ggtccataca | 480 |
| cttgatngat | acgtgcaaag | ctttattatg | ccctctcccc | t | | 521 |
| <210> <211> <212> <213> | 5457 483 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 5457 | all n locat: | ions | | | |
| tgcttctatg | tccttttcat | tgctttaatt | gttgagtaat | ccttgaaaaa | ttgtcttgtt | 60 |
| aaaattccat | tggtttagct | ttcatttcat | tttatttggt | ctttggttat | tacttgtctc | 120 |
| tttgtttcct | tgtttgttgg | ttgccatata | gggaattgga | aggaggattg | gtgccatccc | 180 |
| ttgaagaatt | tgagttaaga | agaaaggggc | caaccacctt | aagagctatt | ggactaagaa | 240 |
| gcactccaaa | ttgagtgaat | caccaaagag | agaacaacca | ccaaaattga | ggactgttct | 300 |
| | | | | | | |

| gtaattttgt | aatttgcaat | ttacttacct | tcattgcttt | caagttttgt | aacaaaaagg | 360 |
|-------------------------|-----------------------------------|------------|------------|------------|-------------|-----|
| cgtttcattg | gaagtgtgtt | gggagcctcc | aattggttac | caaacttcca | tttgtgtgta | 420 |
| ataattttag | gcaatntttc | cttangatag | tgagtgtttt | gttgggaacc | ttgaatgtgg | 480 |
| tca | | | | | | 483 |
| <210> <211> <212> <213> | 5458 586 DNA Glycine max | ς. | | | | |
| <400> | 5458 | | | | | |
| agcttgcata | agacccatat | atagtttata | atttgtccta | ttgtcttatt | gaacatgagc | 60 |
| aaaaattgca | tcccattttg | atacaattaa | tctttcttta | atcactttgg | tttgttgttg | 120 |
| tagtctttca | ttatgaaaaa | aatctgaact | acatagataa | caattagaaa | aagtggtgat | 180 |
| tgtggcaatg | atcactttaa | aatagtcaat | aaaaaaaat | cccttaaact | cccacatcta | 240 |
| attctcttgg | accatgaaaa | aacatgacag | ttaaaaataa | aacaatttga | atatgtgatc | 300 |
| cctggactat | attaatgatc | taatgattaa | attaatgtta | tgattttctt | ttatgtgtag | 360 |
| aaatcaaata | taatattaaa | aatttataat | aactcacaca | ctctactcaa | tcaaactaat | 420 |
| aagattttt | aaaagattaa | atattaatga | tgataagaga | aaattatgta | tttcttttta | 480 |
| tttattctcc | atgaagataa | gggatttgat | aacagacgaa | atccccttaa | tcatacataa | 540 |
| catcaacatt | atatcaagga | aaaaaaaact | atatgaattt | caataa | | 586 |
| <210> <211> <212> <213> | 5459 564 DNA Glycine ma | × | | | | |
| <4.00> | 5459 | | | | | |
| tcccctgtag | taattaaagc | taatagattg | ccaatcttat | cctcaccctt | tttcttttag | 60 |
| gcaaatatta | ttcaatgcac | ttaggactta | taaggatatt | gatttaaaaa | tttaaagtaa | 120 |
| aaatatttt | attagaaaat | aaaaaattat | attatttata | attttttct | ttcctattat. | 180 |
| ttatacaata | aatatatata | tatttttatt | ttaatttctt | aaccaatgct | gcaaaggtat | 240 |

tagttaggat aaaacttgct taaattacag gcatacccac tctctcactc aagttaaacc 300

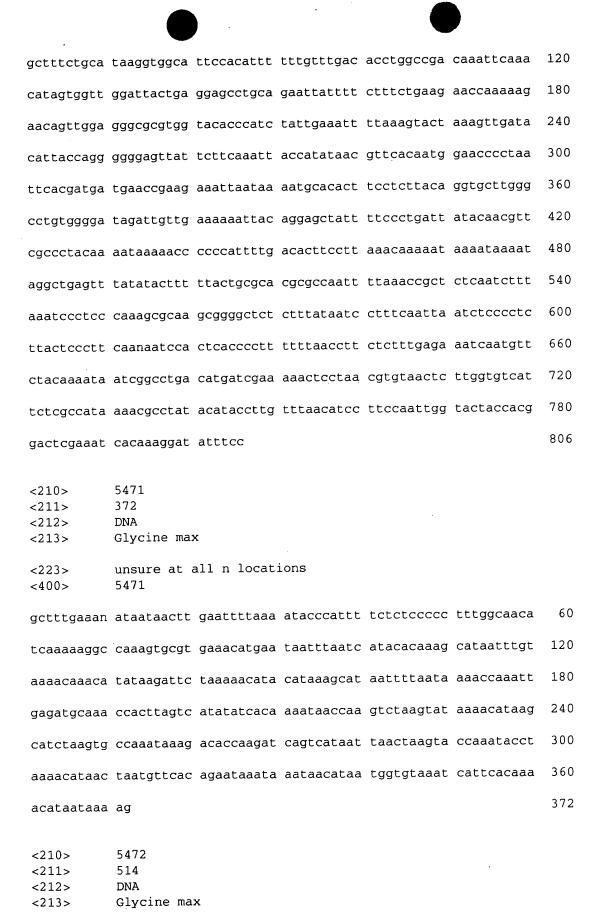
| tgcttaaatt | ataggataaa | acttctagag | aagggtataa | aatataatat | attcattcaa | 360 |
|----------------|-------------|--------------|------------|------------|------------|-----|
| gatttaaatt | aagtatatta | atttttttgg | ttcagatttt | ttttatattc | taaatgaaat | 420 |
| aaaacatttc | actttttta | tataattcta | aactatctat | gataataaat | catcaatatt | 480 |
| ttaactagaa | taatacatgt | gatataattg | gaaatacatc | ttatctcctt | aatatgtggt | 540 |
| tagaaattga | ttcctaatat | gaat | | | | 564 |
| | 5.460 | | | | | |
| <210> | 5460 | | | | | |
| <211> <212> | 464 DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| \Z13> | dijeine mai | • | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 5460 | | | | | |
| agetnaggtt | tgattggttg | gtattttat | attttgttt | tattgtgcga | caactgttta | 60 |
| | | | | | | |
| tttttaaaag | attagaattc | tgatcttttt | tatatcttta | tattttcttc | aaattatatt | 120 |
| ccttgagatg | ttatattatt | tttattttat | ccaaaatgaa | attcatgttt | tcaacggaaa | 180 |
| | | | | | | 240 |
| ataaaatgaa | attcatgttt | ttcttaccac | cacattttca | ttttatccaa | aatgaggttt | 240 |
| gtgatttcaa | ttgaaaatac | ttcccgtctt | tggttcatct | ggacaaaata | tttttaccga | 300 |
| aaatgttttc | aaaaattcca | accaaacgca | tttttatcac | cattttctat | ttatagtgaa | 360 |
| _ | | | | | | 420 |
| aataaaaata | agaaacaatc | aaaccaaaca | tgctaacacg | ttacattatc | Clccalgada | 420 |
| aatttaatat | ttttgttgtt | gttacaatga | gaagtttaat | tttt | | 464 |
| | | | | | | |
| <210> | 5461 | | | | | |
| <211> | 453 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <400> | 5461 | | | | | |
| tataaaaaa | aaaaggttct | tacqqaagaa | agtggcatta | caagttaata | ttctacagaa | 60 |
| | | | | | | |
| ttacagaaat | caaaacatag | tggttggatg | acagagcatc | ctgcagaatt | ctctcctttt | 120 |
| tgaagtccaa | aaaggaacag | ttggagggct | ctggtaacac | ccatctattg | aaatttgaaa | 180 |
| gtactaaagt | tcattcttt | accagtggaa | gttatactac | aagttttaag | acgaggttca | 240 |
| caatggaagg | cctaattcad | gaggaticage | caaggetttt | catcataggt | tcacaacatc | 300 |
| | | | | | | |
| tagatttgac | aactctggta | gggatggatt | ggggaagtta | taactggtgg | tagctttctt | 360 |

| gattatacta | tatctgtaaa | ccaatataat | caccttcatt | ttgaagttct | taaatttata | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttcattctct | tcttttcttt | tattctttct | ata | | | 453 |
| <210> <211> <212> <213> | 5462 510 DNA Glycine max | τ | | | | |
| <223> <400> | unsure at a 5462 | ıll n locati | ons | | | |
| agctntgagg | gatcaaagaa | gaaatagcaa | tatggtgctg | attattttct | ctgtcctttt | 60 |
| cgctctatcc | acaaaagaaa | cagtgctgtt | tgaatttgat | cattgtattg | ctagattttt | 120 |
| gtagttatat | gaattttctt | tttgaattgg | ttcaatgagt | gcatgcatac | attttgttag | 180 |
| atttttatgg | gactagactt | acgctcatga | gacttataat | tttctgactt | ttttatttgc | 240 |
| ttttggtctt | ttgccttttg | ccttttgatt | tcgttactta | ttaaaacatt | gctgttggtt | 300 |
| gccattggag | tttgtgagaa | gacttcgtac | tagtattttt | ttgagtgctg | ttattttact | 360 |
| ttattattgc | taatgaataa | cagcttttga | atgtattaag | gagtaataat | acattagtat | 420 |
| tatctgatac | actattgata | atctttaaac | caaaataaat | taagagcaat | tggttagttt | 480 |
| attaaattat | aaactgaaaa | aatggtttac | | | | 510 |
| <210> <211> <212> <213> | 5463 431 DNA Glycine max | < | | | | |
| <400> | 5463 | | | | | |
| tcttgcactt | caagaaggcc | tatttgtaag | ttctaaatct | ctagaaatag | ccattattga | 60 |
| gcctattcct | ccaataacta | gatatctatt | gtcctttctc | cctctctccc | tctctgtgtt | 120 |
| aatgtcaaaa | ccagtacatc | atgataaata | ctaattcatc | aaatacaaat | agttatagca | 180 |
| cacaaaattt | attcagtgcc | ctctaggttg | acttatcttg | tatgaatgaa | tattcagtgc | 240 |
| caagagccta | gtcaccccaa | atattcaaac | tttaatcttt | cgtaatagaa | gttagaaaca | 300 |
| gggttattgt | ccttcgtaat | tctcatcatg | ggttactttt | ttcacctcaa | cggttatttt | 360 |
| ttttgtctca | attttaagtg | ctggtgcgag | tacatcaact | gcaaacccga | gtaagttaaț | 420 |

| aatgaccaat | a | | | | | 431 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5464 517 DNA Glycine max | τ | | | | |
| <400> | 5464 | | | | | |
| agcttataag | aacaaaattg | ccttaatcat | taccaaatat | gcatgtgaat | taggacgcat | 60 |
| caacaagaat | caaaccaagg | ctattgtgca | agcaatcaat | ggggcaaaac | acaccaaatg | 120 |
| attataatga | tggatggctc | aaattctcac | aaaggtaaaa | tcatcacttt | caaattgagc | 180 |
| tttcaaaact | atcatgacat | gtagaaaaga | atcaaggatt | tcaagtcaca | aaatgtcaag | 240 |
| aacttttatt | ttcaaaacaa | ttacccattt | cttgaacata | tcctataatt | caaagaaaaa | 300 |
| catgcaaagt | cgtacgtgca | catgatattg | acccaaaata | ttaaactgaa | aatccgacga | 360 |
| aactaacaac | attaacaaat | taacacaact | aacaaattaa | caaaaccaac | aaaactagca | 420 |
| aaaccaaaga | acactccccc | cccatactta | aacaacacat | tgtcctcaat | gtagcacaat | 480 |
| taaaagatta | aaaacaatta | aatcatcaaa | gagaatc | | | 517 |
| <210> <211> <212> <213> | 5465 478 DNA Glycine max | × | | | | |
| <400> | 5465 | | | | | |
| ctaagcttct | atgaaggttc | gttcctaatt | tctctacaat | tgcatcacct | ctcaatgagc | 60 |
| tggtgaagaa | aaatgtggca | tttacctagg | gtgaaaaaca | agagcaagcc | tttgcttttc | 120 |
| tcaaagaaaa | gcttactaag | gcacttgttc | tagctctttc | tgacttttct | aaaacttttg | 180 |
| agctagaatg | tgaagcctct | ggagtgggag | ttggagctgt | attgttacaa | ggtgggcacc | 240 |
| ctattgctta | ttttagtgaa | aaaattcata | gtgccaccct | caactacccc | acctatgata | 300 |
| aagagcttta | tgccttaata | agagccctcc | aaacttggga | acattacctt | tgttccaagg | 360 |
| aatacgtcat | ccatagtgat | catcaatcac | ttaagtacat | tagagggcca | agcaagttaa | 420 |
| acaaaaggca | tgcaaaatgg | gtagagtacc | tagagcaatt | tccatatgtt | atcaaata | 478 |
| <210> | 5466 | | | | | |

| <211> <212> <213> | 476 DNA Glycine max | ς | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|--------------------------|------------|
| <400> | 5466 | | | | | |
| agcttcttgc | tacattatgg | tcaatgagct | gcagaatgag | gggaaaaagc | aattttcctg | 60 |
| ttataaaaaa | tatattagcc | aattttgatg | atgctttctg | agaattgaga | ggcttgcctc | 120 |
| ctaaaaggga | ttgggatcat | gctatcattt | tgaagagggc | tcaaattcct | aatatttgcc | 180 |
| cccacatgta | tatgcattat | caaaagaatg | agatagagaa | aattgtgaat | gatatgcttt | 240 |
| gtgctgtaag | gcccaacact | aaccctttca | gtagccctgt | tatacttgtc | aagaagtatt | 300 |
| gtgtgtggag | attttgtata | gactatcagg | ccatagacaa | gtaagcaccg | gataaatttc | 360 |
| ctattcccat | aatttatgaa | ctactaaatg | tattgcgtga | tgcactgatt | tttgtaagat | 420 |
| gaactactct | tttgctaaca | taaatacact | cttaatggtc | ttgaacagta | taagac | 476 |
| <210> <211> <212> <213> | 5467 492 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tggagaggat | gcttcaatgg | aggaaaagaa | agagggagag | atagagagag | gggggagcac | 60 |
| caaattgaag | gaagaaaaag | ggagagaagt | tgaactttga | gttgtgtctc | gcaagactct | 120 |
| cattcatcga | agttacaaca | agtgttacac | atgcttctat | ttatagacta | cgtatcttcc | . 180 |
| ttgagaagct | gtcttgagaa | aacttccttg | agaggcttct | ttgagaaaac | tttcttgaga | 240 |
| agctagagct | taactacaca | cacgcctgta | ataactaagc | tcacctcctt | gagaagcttc | 300 |
| cttgggaaga | ttcctgaaga | agctagagct | tacctacaca | caccccctat | aatagctaag | 360 |
| | | | | | | |
| ctcacccgca | tgccccaata | catgaaaata | tataaaaaag | tgcctattac | agagactact | 420 |
| | | | | | agagactact aaataccagg | 420 480 |
| | tgaaatacaa | | | | | |

| <400> | 5468 | | | | | |
|-------------------------|-----------------------------------|------------------|------------|------------|------------|-----|
| agcttccaca | aatccctcat | gtaagactat | gtctaaacta | aacaacatta | ttgtaacaat | 60 |
| ataattaaaa | ccaaaactta | acctacaaat | ccctcatgta | aggctaagtt | tcaatcctgc | 120 |
| ttcaatcaag | ttctaaggca | ataatacatt | tcctaatgct | aaagtcacct | aattgtgcac | 180 |
| acaaatgggt | gatcagacca | aaagcataca | aacattaagc | attgaaggga | gcattgaaca | 240 |
| cagaaaacat | aatcaattag | atattaggta | tttacatcag | ctgttcatta | aaaatcccca | 300 |
| aatagggtgt | ttagccaacc | attaaaaaga | aaccctaaca | atgaatgaga | ttaaaagcag | 360 |
| agaatgatag | ttccttacac | aagaaggggg | attcctcctc | ctcttctcag | tatctcacac | 420 |
| tcactctcta | ctcaataatc | tctc | | | | 444 |
| <210> <211> <212> <213> | 5469 477 DNA Glycine ma: | × | | | | |
| <400> | 5469 | | | | | |
| ttgagccaaa | atcctgactc | accataaacc | ttgacccagg | gtgagaatgt | caatccttac | 60 |
| cctcggaagc | aaaaaagaat | agaagggaaa | tttccaatca | aagaaaagag | aaggaaaatt | 120 |
| tccaatgaaa | gaggaaaaag | aaaagaaagg | aaattcccaa | tcaaagagtg | ggagaaggaa | 180 |
| aaaagaaaag | gaagaaaatt | cccaaccaaa | gaatgggaga | aagtaaaaaa | ggaaggaagc | 240 |
| tcctggtcaa | agaaaccaga | agaaatgtgc | agagaggtct | ttggaccaga | cgatatctga | 300 |
| acagtacaga | attgtcacta | aatgaacaaa | aaggaaggaa | aggaaaccac | gacctaaaat | 360 |
| ggtcttctcc | ctttaattac | caaccaaaat | cccgtgcgct | agcgaccctt | ttttctcgcc | 420 |
| ccgcactaaa | aaaaaaaca | gaaaaaggaa | aagcccagga | aaatcaaaag | ccaaaaa | 477 |
| <210> <211> <212> <213> | 5470 806 DNA Glycine ma | x all n locat | ions | | · | |
| <400> | 5470 | | | | | |
| cccctgatg | agtctcttga | gaaccctctn | aaatcgtnag | cttgtgaaaa | gaaaaagggt | 60 |



| <400> | 5472 | | | | | |
|----------------------------------|---|------------|------------|------------|------------|-----|
| ctcagcttgc | attectetet t | cccttaaac | ttcttttatt | tattgctatt | tatcttttgc | 60 |
| tttaaagaag | tttattttga a | ttgtctttt | gagtaattca | tgttaagggt | gcattgttaa | 120 |
| tccaaaaaga | aagagtgata g | ttcaattgg | ggaatagtct | ttgcatctta | attcaacccc | 180 |
| cctttttctt | aaggtaactg a | ggccatttg | tcccacatcc | tattcttgat | aactcacttc | 240 |
| tctctaaaaa | gacaaaatga g | gtcacatga | acgtctatat | ttttacttga | aaacacagtc | 300 |
| aatcaaatgc | ctttttattt t | tttattttg | aaacttattt | tgaaacttat | ttgctttgaa | 360 |
| ctttactcgc | tgttttacga c | accccacc | aacgtgcaag | acgagtaatc | tctgattgaa | 420 |
| cagtcttaga | agtcaacact c | aagaacgca | agtcgcttga | gccaacagaa | ccatggcttt | 480 |
| gccccacatt | ccagtgaaag t | tgaataacc | aaca | | | 514 |
| <210> <211> <212> <213> | 5473 414 DNA Glycine max 5473 | | | | | |
| | gtacaaaatg o | catattcttt | ttgtgattgg | tatttgaata | taattcattg | 60 |
| | tgaattggag t | | | | | 120 |
| tgtatggata | ggtcatacac a | agaggactta | ggttctgttt | ttttttttgt | atatgttttg | 180 |
| tgttgatgta | attatctctc a | attgcacaac | tagtacatgt | atatgtatca | tttttttcta | 240 |
| aatacatatc | aatttgctat a | aaaaaggttt | gtttttaata | agcaaaaatg | aaagctatgc | 300 |
| tctaacccaa | atacacaatc (| cacatatttg | ctactttaca | aagtgaaaaa | tgtattattt | 360 |
| tggataaatt | ttgtgttttg a | ataaaaacaa | attcatggtt | taaaaaaaaa | acta | 414 |
| <210> <211> <212> <213> <400> | 5474 455 DNA Glycine max 5474 | | | | | |
| ttgagccaaa | atcctgattc | accataaacc | ttgacccagg | gtgagaatgt | caatccttac | 60 |
| cctcggaag | : aaaaaaagaa | tagaggggaa | atttccaatc | aaagaaaaag | agaaggaaaa | 120 |

| tttccaatga | aagcaaaaaa | agaaaagaag | gaaaattccc | caatcaaaga | gtgggagaaa | 180 |
|----------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gcaaaaaaag | aaaagaagga | aaattcccca | atcaaagagt | gggagaaagc | aaaaagaaaa | 240 |
| gaaaggaaaa | ttcccaatca | aagaatggga | gaaagtaaaa | aaggaagaag | aagaaggaaa | 300 |
| gaaagctcct | gatcagggat | cgaaggaaaa | acagaagata | tgtgcagaga | ggtctttgga | 360 |
| ccggacaata | tctgaacaat | acagaattgt | caccaaatga | acaaaaaaga | aggaaaggaa | 420 |
| accacgacct | aaaatggtct | tctccctttg | attac | | | 455 |
| = | 5475 323 DNA Glycine max | κ | | | | |
| | gagaaagcgt | ggaagagtca | gtcttcctac | ttttgtttgt | tgaccacaga | 60 |
| | | | | gggacgtcag | | 120 |
| | | | | ggcatagtca | | 180 |
| | | | | ccaataaaag | | 240 |
| | | | | | | 300 |
| acaaagcaag | gaggettgtg | tggeggetgg | CCCactatga | atcttgagtg | gcacccygaa | |
| aatggcctct | ggtaatcgat | tac | | | | 323 |
| <210><211><212><213> | 5476 505 DNA Glycine max | x . | | | | |
| <400> | 5476 | | | | | |
| ttgcaatcac | taagagactc | ttttaacaac | gatagactaa | gacttagctt | tcttattgat | 60 |
| ctttggtttc | ttggtcttga | tttggactta | aaataaaact | tgtgtttctt | ttgtcttggc | 120 |
| atcatcaaga | ccatcataca | catacattca | caaacatcgc | tatattgtcg | taacaaccca | 180 |
| ttgtcttttg | aaccatggat | ccctcccact | caagttttgg | tgttatgcat | tgtaaatcgc | 240 |
| aacgtgtctc | atcaatcgga | tgccctctct | cacactaaac | gaaaagtctc | cattagaagt | 300 |
| cttgtttcat | cgtccatcaa | attatagtaa | actaaaagct | tttggttatc | tttgttttcc | 360 |
| ttggttcact | ccatatacaa | ctaacaaact | tcagaccaag | tccgtaccat | gtgtttctta | 420 |

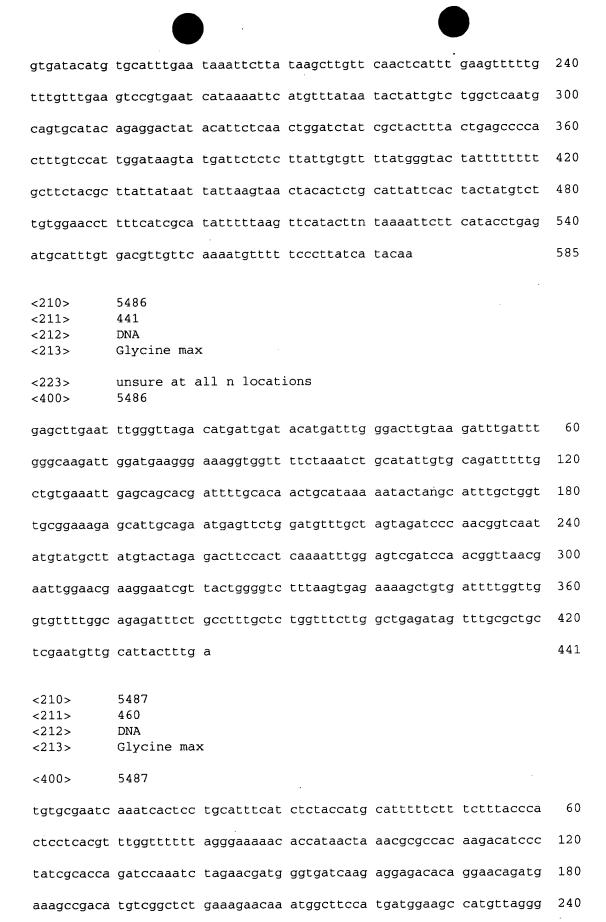
| | | • | | | | |
|----------------------------------|-----------------------------------|------------|------------|-------------|------------|-----|
| ggttacaatc | ttactcaaag | tgcatatctt | ttgttatgat | ctttcagagt | ctaagttgtc | 480 |
| acctcccgca | tgttgaatca | ttgaa | | | | 505 |
| <210> <211> <212> <213> | 5477 440 DNA Glycine max | : | | | | |
| <400> | 5477 | | | | | |
| agctatagat | attagctgaa | agactcatgg | atgactttat | ctctaaaatg | caccctgatg | 60 |
| aaagagcccc | tctcacttga | agcgtggaat | tgtaccttat | gttgaaattt | gactttttac | 120 |
| atagagtaaa | gtggggacga | ggtcaaactt | ttgaccagtg | gccggcgaag | ctttgatacc | 180 |
| aaaattaaag | aaaatggttt | acagaaattg | tttgttaggc | agcataaatg | ttttagtatt | 240 |
| tacaaatcct | atttacaaaa | tcagagtact | tctaacttaa | cacaaataca | ataacttgta | 300 |
| tagtaatcag | taggcttaat | taattatact | tttggctcct | ttgtgatagt | caatgtgtga | 360 |
| tttttgtcct | cttataattc | tttgcagcaa | tcaaatcctc | cattgtttcc | aattaaaaat | 420 |
| acttttggct | cctttatgat | | | | | 440 |
| <210> <211> <212> <213> | 5478 481 DNA Glycine max | × | | | | |
| <400> | 5478 | | | | | |
| tgcttctaca | tatgggttct | atcgcacaga | atggcatgat | cactggctga | catattctca | 60 |
| attagctctg | ttgcttttt | ggggtcttca | gctttatttt | tccccctgca | gaagcatcta | 120 |
| gcaatttctt | ggtttgtggt | atcagcccat | ctataaacat | attcaattga | attgtcttgg | 180 |
| aaaacctatg | ggtgggagtt | cttctcaata | aacctctgaa | cctctccaat | gcttcactca | 240 |
| tagattcatc | acggaactga | tgaaatgaag | agattacagc | tttcccttcc | gcagtcttgg | 300 |
| actctgggaa | gtatttcttt | agaaactttt | caacaacttt | "ttcccaagtt | ttcagactgt | 360 |
| tacccttaaa | taagtgaagc | cacctcattt | gctctcctgc | caatgagaat | gagaatatgc | 420 |
| tgagtctaat | agccttatct | ggcacaccgg | caatcttaac | actgttgcat | attttaatga | 480 |
| a . | | | | | | 481 |

| <210> <211> <212> <213> | 5479 571 DNA Glycine max | · | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5479 | | | | | |
| agcttgacta | tatacctctt | ccattgtgct | aagcatgcta | tttacaacat | cttttcgtga | 60 |
| agaaagactg | aaccaccaag | gaaacaattc | gaaacacctg | aaagcaaaac | tcgataaagg | 120 |
| aaatcatgtt | accaagcaat | acataaattg | gctacatagt | gtataaacat | gtatctatta | 180 |
| ggaatggatg | ctcccatgtt | aaaattccat | attatcttgc | catgtaaaag | ttttgtctca | 240 |
| atgtctccat | agacatttgt | gtgagctcta | ttaaaatttg | tgaatatttt | caaagagact | 300 |
| ataaataagt | aaaagatttc | ttagaaattg | ggcttaaggc | cttagtgtca | ccacaatgaa | 360 |
| gacagttgag | ggtttgtgaa | agcatagtct | cccaagtcaa | gaggctttta | taccaactat | 420 |
| aaataaagtg | acaactatat | tggttctccc | accaatttct | gcccagggag | aatacaaatg | 480 |
| tatataggct | gcctaataat | tctaatctaa | taataccagc | aaaaagaaac | ctgtttgcat | 540 |
| tcctaatata | ataaaaccag | gcaactaatt | t | | | 571 |
| <210> <211> <212> <213> | 5480 358 DNA Glycine max | × | | | | |
| <400> | 5480 | | | | | |
| tattgtggct | tgataacctg | cgaaaaaatg | ataaaatggt | atcattatat | tactcagaac | 60 |
| aactcttcta | ctttatgcta | atactaaaga | cattaattgc | attaaggaaa | ttatcccctc | 120 |
| taatttggca | cgtgtatgaa | agaataatta | caatgtacgt | aatggaaaca | tgcataaaat | 180 |
| gggttaaaga | attcatacaa | ccttgggttt | gtttcaattg | ataattacaa | attcagagac | 240 |
| gtccttacaa | attcagatga | taattacaat | gtgccgtaat | aaagccgtcg | taagttcata | 300 |
| agctgatcct | ggctggtcaa | cctgcatgag | atcgtactag | atgttatcat | cgattaca | 358 |
| <210> <211> <212> <213> | 5481 158 DNA Glycine ma | x | | | | |

| | | | | | • | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5481 | | | | | |
| tattgaatat | aactttttct | aatgtctcgc | tcacgaaatt | ataatcgtca | acccgtattt | 60 |
| cttttgtttt | tcccccggc | catctcttca | caacgggaaa | attttacagt | cacaatcccc | 120 |
| cattcctcac | ccggccatct | tttttttctc | cctccctt | | | 158 |
| <212> <213> | 5482 637 DNA Glycine max | ζ | · | | | |
| <400> | 5482 | | | | | |
| gcttgtctta | agttctgaga | gacaaaagga | gtcatgtact | tatgaagatc | tcttaccaag | 60 |
| tttatgtagt | attttgctac | cttttgtcct | gtctcatacc | tatctgcttt | gtattggatc | 120 |
| atccacaggt | tcccggctct | atgagggaaa | gcagtttctg | ttgatggatt | ctcagccatt | 180 |
| cttccaccat | aagggttgaa | atacattact | gctttctcta | attcaatcat | cttcttccaa | 240 |
| atccctccca | accctccttg | ggtattggtc | tcttcacata | gtcagatttc | cttttcaagt | 300 |
| acttgagaga | ccaaggttgt | ctctctagca | aaatctcaac | tggggttgca | atgtccatgt | 360 |
| tgtaccaaaa | cagcacggat | tgaagccagc | ttgtttcgat | gcattcagat | tgcttcaacc | 420 |
| ccaattaagg | agacctctcc | tccatgacag | aaaacagagt | tttggagtcg | ctgaggaaga | 480 |
| gagctatgaa | ggtagcccct | cactgtcttt | atgatcttct | gttggagata | attctgttcg | 540 |
| agacattgtt | gatcaactaa | tatggacact | tcttcaaatt | taagtcttga | ttcatcacgt | 600 |
| tgctggagac | tattaacccc | ttttgttggt | ctcaact | | | 637 |
| <210> <211> <212> <213> | 5483 483 DNA Glycine max | ς. | | | | |
| <400> | 5483 | | | | | |
| _ | | | | atggatggtt | | 60 |
| gtgttgcttc | tgcctttatg | gtggttaagc | attcaaatat | tgtgttttgc | ttctgtcttg | 120 |
| agtggttaag | caccatgttt | agcttctgct | cttgatggtt | aagctttgtt | gattctgcct | 180 |
| ataaggtggt | taagcacttg | ttgttggttc | gcttctgtct | tgagtggtta | agcatcatgt | 240 |

| ttggcttatg | ctctggatgg | ttaggctttg | ttgcttctac | ctatatgatg | gttaagtact | 300 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tgttgttggc | ttgcttctat | cttgagtggt | taagcatcat | gcgtagcttc | tgctcttgat | 360 |
| gattaagttt | ggtttgcttc | taccttttat | gtgggtaaat | ggttaagcat | tgtgttgtgg | 420 |
| cttctgctta | atgggtaagc | atattccaaa | tgtctttgaa | tgttttcagt | cattgtcaat | 480 |
| ctg | | | | | | 483 |
| <210> <211> <212> <213> | 5484 543 DNA Glycine max | · · | | | | |
| <400> | 5484 | | | | | |
| • | | | | atatatat | | 60 |
| aattagtatc | cttagagtat | taattaagga | actaaaggag | aaagattttc | ttaaaaaata | 120 |
| tacaaaatta | ttttatttat | gactttttt | acttttatta | tttctattat | aaatatttt | 180 |
| tcatttagtg | tcctaaggtt | agcaagacca | tatatatata | tattcctttg | gcggatcgaa | 240 |
| ataaataaaa | aatcttttga | gccttgtgga | cgagattcta | gagggtaatt | tgaagaaaaa | 300 |
| gatcattgta | aacagttgta | gcatttgttg | ctagagaaat | gattatttgg | actcaccagg | 360 |
| ttcactagag | cagacttggc | tttaactttt | tćagacagct | tcaaattaat | tccatttttc | 420 |
| attatcaaat | tgaataaagc | acatgatcaa | atctttcaca | gtttttattt | ttattagata | 480 |
| tatgtttcac | agttttaatt | aaaaaaatca | acatgtcatt | atttattaga | agactctgat | 540 |
| gac | | | | | | 543 |
| <210> <211> <212> <213> | 5485 585 DNA Glycine max | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| tgaagtttgc | atcttgcttg | attctattat | tgaagaagct | aattaagaac | tctattcaaa | 60 |
| atggcttttg | ttactgtcaa | ctatttgagg | ttcaaatgaa | tcaggttcca | cagatctttt | 120 |

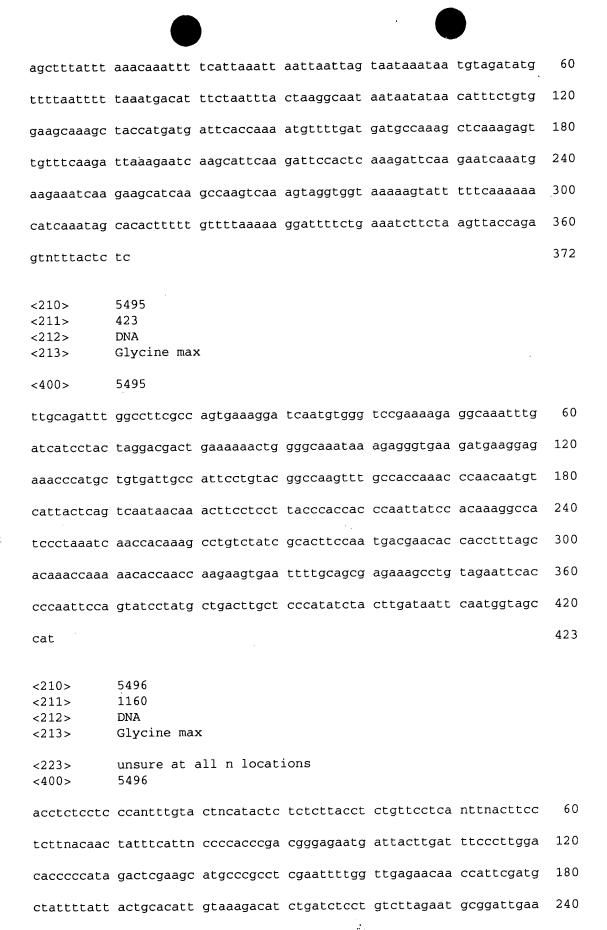
gtcatttgtt tcaatagttc atttcatttg tatataactt ccgtgtgatt taatcatgat 180

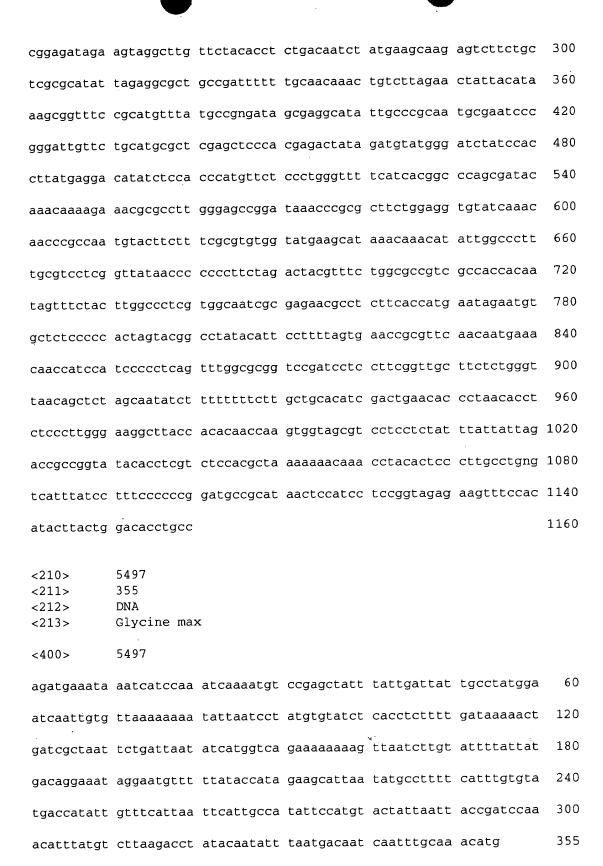


| | tantaanna | as stataacc | accactacca | ctgtcagttc | aactaccaaa | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | | | | | | |
| gcagacccaa | ctctcttagc | aactgcgcac | catcctccct | caaacatagt | aggacgcgga | 360 |
| agggacacac | tggggcacga | tggcagccct | cacctgggat | acaaccgagc | ggcttaccct | 420 |
| tatggattgc | cgcccaacta | ctcaccaccc | gtcttgcaag | · | | 460 |
| <210> <211> <212> <213> | 5488 457 DNA Glycine max | C | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttcacaa | ggatgtgtta | tggtacactt | tttaagaaag | agtatattag | caagttatac | 60 |
| tttgagtatg | tagcttttaa | gataatcgga | attataactt | tctaacttat | taaaaaatga | 120 |
| ggatacttta | ataaatcttt | gattagaatt | tataataagc | aaatattttt | taatatacat | 180 |
| atatatatat | atatatatat | atatgaagaa | ttttaattat | gatataagat | tctctaacta | 240 |
| ttgataattt | gttttaaaga | atattaagat | gtaatctaca | tataaagata | aatatagaag | 300 |
| gtcgaaagag | gtaaactatt | aagtatatta | aatatgtaaa | taaagataaa | aagagaatag | 360 |
| tttgaaatag | ttgatagaaa | aaatagttga | ctagttttag | aaataggctg | tgaaatgtat | 420 |
| gtgtgaaatg | cntctccnac | gatgagaaga | gagagag | · | | 457 |
| <210> <211> <212> <213> | 5489 464 DNA Glycine ma: | × | | | | |
| <400> | 5489 | | | | | |
| tctagccaaa | tggacttacc | ttgaattaat | tcctttgata | gcccctttga | gcctattttc | 60 |
| ccctttcttt | gttttgaagc | tcattacaag | ccttaagtga | aaaaaccatg | atatcacctt | 120 |
| acccttaagg | aattatggag | ctttggaatt | gttttgggaa | taagctggga | ataagtgtgt | 180 |
| gtggggggg | ggggggccat | ggatccctcc | cactcaagtt | ttggtgttat | gcattgtaaa | 240 |
| tcgcaacgtg | tctcatcaat | cggatgccct | ctctcacact | aaacgaaaag | tcttcattag | 300 |
| aagtcttgtt | tcatcgtcca | tcaaattata | ggtaactaaa | agcctttggg | tatctttgtt | 360 |

| ttccttgggt | cactccatat | acaactaaca | aacttcagac | caagtccgta | ccatgtgttt | 420 | | |
|-------------------------|-----------------------------------|-----------------------------------|------------|----------------|------------|-----|--|--|
| ttaagttaca | tcttactcaa | aggcatatct | tttgttatga | tctt | | 464 | | |
| <210> <211> <212> <213> | 5490 472 DNA Glycine max | < | | | | | | |
| <223> <400> | unsure at a | unsure at all n locations 5490 | | | | | | |
| agcttaaagt | atgcccgagt | cattcatccc | tatgagatgt | tgntgaagta | ttggcgatca | 60 | | |
| gaattgccat | tccttggatt | ataaggttga | accaagctca | tgctcttaca | aaaaggttca | 120 | | |
| tcaagtcaag | ttgaaatatg | gaagtaaccg | tctttcaaaa | ttggggcaaa | agatgaatcg | 180 | | |
| agtcacatca | ctgcttcgtc | tactgccaaa | catatttagg | attattgatg | tccttgttac | 240 | | |
| ttccagtttc | accttgacaa | agatgtcatg | gaccatgttg | aaaatctaaa | ttgattcaac | 300 | | |
| cccatatctt | gcgtaaaaat | gccattcctt | ggattatagg | gttgaaccaa | gctcatgctc | 360 | | |
| ttacaaaaag | gttcatcaag | tcaagttgaa | atatggaagt | aaccgtcttg | caaaattggg | 420 | | |
| gcaaaagatg | aatcgagtca | catcactgct | tcgtctactg | gcaaacatat | tt | 472 | | |
| <210> <211> <212> <213> | 5491 407 DNA Glycine max | × | | | | | | |
| <400> | 5491 | | | at ant t and t | aggataatat | 60 | | |
| | | | | ctgattgagt | | 120 | | |
| | | | | ttcaaacgac | | | | |
| | | | | | aatgttgaag | 180 | | |
| • | | | | gtctgattga | | 240 | | |
| | | | | aattcaaacg | | 300 | | |
| | | | | | tgaatgttga | 360 | | |
| agctctgagc | caattcaaac | gacaataact | ttttactcgg | atgtctg | | 407 | | |
| <210> <211> | 5492 438 | | | | | | | |

| <212> <213> | DNA Glycine max | c | | | | |
|-------------------------|--|------------|------------|--------------------------|------------|------------|
| <400> | 5492 | | | | | |
| agcttccact | ccagttccca | ttcgagtacc | taacgggtgt | gattttcaaa | cgttaaaaac | 60 |
| cagaatacac | aataccctta | agctaaccga | caaacaattt | ttggatgaaa | tttactaacg | 120 |
| acagcctttc | acgtatgcag | gtaatcaatt | tcggtttaaa | tgtatgcaac | tgaaagatga | 180 |
| tgctgatgtt | aacacaatgt | taatgtgtaa | tcatgaattt | ttgtttgttg | atccgattga | 240 |
| gtttttatgt | agcattgcta | gaaccccaga | tggcatttta | aatttacttg | aatctattat | 300 |
| gaaccctact | catgatgccc | tgctatatta | caatgggagg | tggaacatgt | cacgccaaaa | 360 |
| tgagtttgtt | ggttactcat | tcgtaggaaa | aaatccccaa | aactttgaca | ttcccactgg | 420 |
| atgtaccatg | gatgaact | | | | | 438 |
| <210> <211> <212> <213> | 5493 425 DNA Glycine ma: | x | | | | |
| <400> | 5493 | | | | | |
| ttatgttttc | cctcccgtgg | atgtagcctt | gatcaaaggt | gaaccatgta | aatctgtgtg | 60 |
| ttctttctct | tttttcttct | ctttcacctt | gctgcacaat | tatgtgtgta | tgacatttct | 120 |
| attctgttgc | atctcctgct | gctgttcttg | tttgttcttc | atcacttcca | caacaaactg | 180 |
| gtatcaagag | ctcaagttgc | gatcaaggga | attcaagatt | cttgtctgaa | tacaaagatc | 240 |
| aagctatggg | agtcttgtťt | ctggttcttc | cactgcttca | ttgtgatcaa | taacactcaa | 300 |
| gaaatcatgt | | | | | | |
| 3 | gaaacacaat | caggattgaa | aaattcaatg | gaaagaacag | cttcaatctg | 360 |
| _ | | | | gaaagaacag tttgggctcc | | 360 420 |
| _ | | | | | | |
| tggcgcatca | aaaagcatgc 5494 372 DNA Glycine ma | tttgttgaag | gaacaacgtg | | | 420 |





| <210> <211> <212> <213> | 5498 375 DNA Glycine max | ς | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5498 | | | | | |
| catgcaagct | tggttaagaa | gattcctaaa | aaagttagag | cttaactaca | cacacctctc | 60 |
| taatagctaa | gctcaccttc | ttgagatgag | aagctagagc | ttagctacac | acccctataa | 120 |
| taactaagct | cacccctatg | ccagaaaaaa | catgaaaata | caaaaaaagt | ccttactaca | 180 |
| aagactactc | aaaaggcccc | gaaatacaag | gctaaaacct | tatactacta | taatggccaa | 240 |
| aatacaaggc | ctaaacgaag | aaaaaaccta | ttctaatatt | tacaaagata | agcgggctca | 300 |
| tacttagccc | atgggctcga | aatctaccct | aaggctcatg | ataaccctaa | ggcctttcct | 360 |
| tggattatct | ggccc | | | | | 375 |
| <210> <211> <212> <213> | 5499 394 DNA Glycine max | × | | | | |
| <400> | 5499 | | | | | |
| ttctaaagtt | ttctggtttc | caaaccttga | aaacaaaagt | gtgctatatc | ttttcattct | 60 |
| cttctgcctt | tgccaaaaag | aattcgccaa | ggactaatcg | cctaaattct | ttttgtgtct | 120 |
| atcttctacc | ttctgcaaaa | gaacaaagga | ctaaccgcct | gagatatctt | ttgtttcccc | 180 |
| ttcacaaagt | ttcaatggac | taaccgcctg | agaactttgt | cttaacacat | tggagggtac | 240 |
| atcctttgtg | gtacaagttg | agggtacatc | tactcgggtt | gttatgactg | agaacacaag | 300 |
| agggtgcatc | tcttgtggat | caattcaagt | gaagggtaca | tccacttggt | tgttcaaaga | 360 |
| gaacaaggga | cggtacattc | cttgtggatc | tttg | | • | 394 |
| <210> <211> <212> <213> | 5500 308 DNA Glycine ma: | x | | | | |
| <400> | 5500 | | | | | |
| aactcgaggc | gagcggcagg | catgcaagct | ttttgttgcc | attgaaaaat | ctaaaccgga | 60 |
| gctatgatca | actttaattt | atggctgatt | caagaccgac | tatctgacct | atcacttgct | 120 |

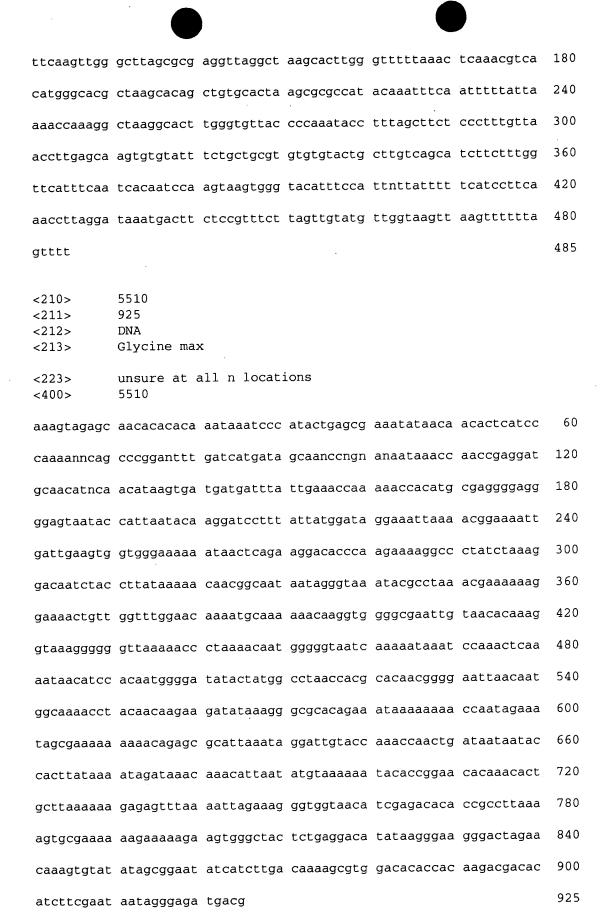
| gggacgatcc | ctaatcctac | ggatgatttt. | tacgaccaca | taaaaggagg | ttgtcgtatt | 180 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| atacctcctg | atttcagacg | caacggatgt | tgccacaaag | acaacagtga | tattttttt | 240 |
| attgcgataa | agacaccaat | gatttttatg | gacattttca | aagaaaccca | tgtggcatcc | 300 |
| ttaatata | | | | | | 308 |
| <210> <211> <212> <213> | 5501 396 DNA Glycine max | ς. | | | | |
| <400> | 5501 | | | | | |
| ctgaaggtgc | gtagcccacc | attttcccta | gtagaatact | ggtaatgtgt | ctactatcat | 60 |
| tgtcatcgtt | tttttcgtca | ttgaggtgcc | acttgagctg | ccaagttctc | cacctttggg | 120 |
| cgtattcttt | gaaagatccg | tgcccccttt | tttgcacata | ttttgtagtt | gcatcctatc | 180 |
| cgaagccatt | ataccgacac | tgcctaacga | aggcaaccat | taggtcctcc | caggaataaa | 240 |
| ctcgggaagg | ttccaagtta | gtgtatcagg | taacaactac | cccagtaaga | ctttcttgga | 300 |
| aggaatgtat | caacaattcc | tcatcttttg | cgtatgcccc | catctttcga | caatacatct | 360 |
| ttagatggtt | cttggggcaa | gtaatcccct | tgtact | | | 396 |
| <210> <211> <212> <213> | 5502 383 DNA Glycine max | x | | | | |
| <400> | 5502 | | | | | |
| agcttgctta | agaagattcc | taaagaagct | agagcttagc | tacacatacc | tctctaatag | 60 |
| ctaagctcac | ctccttgaga | tgagaagcta | gagcttagct | acacaccccc | tataatagct | 120 |
| aagctcaccc | ccatgacgaa | aaacatgaaa | ataacaaaga | aaagtcctta | ttacaaagac | 180 |
| aactcaaaat | tccccgaaat | acaaggctaa | aaccetatac | tactagaatg | gccaaaatac | 240 |
| atggcctaga | cgaaggaaaa | acctattcta | atatttacaa | agataagcgg | gctcatactt | 300 |
| agcccatggg | ctcgaaatct | accctaaggc | tcatgagaac | cctagggcct | ttccttggat | 360 |
| ctctagccaa | tctaattgga | atc | | | | 383 |

| <210> <211> <212> <213> | 5503 371 DNA Glycine max | ς . | | | | |
|---|--|--|---|---|---|---------------------------------|
| <400> | 5503 | | | • | | |
| tgaatgggat | tcagacgtgt | tgtgatgata | acagtgatga | caataaagca | tgatgacaac | 60 |
| tgtgagtggc | ccagcccgct | cagcgatctg | ggatctagct | ccgagttcat | gagcctagca | 120 |
| cgatgctaga | tctcacgact | cgagatcaag | atttcagact | ccagattgcc | gaatgaagaa | 180 |
| cagactcact | catgataacg | cctaactttt | ttctcccaac | attgaatacc | acatgagttt | 240 |
| ctgacgaaat | ctttacccat | gagcttttac | tctctactaa | tcgatcacca | tactggtgta | 300 |
| gtgggctacc | cggaacgaga | tgacgcttga | aaaagttttc | aaactgaatt | tacaatgctc | 360 |
| cactcatttt | С | | | | | 371 |
| <210> <211> <212> <213> | 5504 467 DNA Glycine ma | x | · | | | |
| <400> | 5504 | | | | | |
| agctttatac | aattaattaa | gatcaatggc | caatatacaa | ttaattaatt | acatatatac | 60 |
| | | | | | | |
| ttatatagtg | ggagaatagt | gtctatcaga | | | tttaattaca | 120 |
| | | | gttttaattt | tttgtactgt | | 120 180 |
| aagacttcat | ttatttttt | gtctatcaga | gtttaattt | tttgtactgt | aaaattcaaa | |
| aagacttcat agtaaatgat | ttatttttt | gtctatcaga ttaaaaaaaa | gtttaattt gttgattcat aataatagta | tttgtactgt ggattatttt aatgaaggaa | aaaattcaaa | 180 |
| aagacttcat agtaaatgat tctatttcta | ttatttttt ttccactcat taattaactt | gtctatcaga ttaaaaaaaa aataccaagg tagaaaaaat | gtttaattt gttgattcat aataatagta ttattaatta | tttgtactgt ggattatttt aatgaaggaa aactagctat | aaaattcaaa | 180 240 |
| aagacttcat agtaaatgat tctatttcta attgttttga | ttatttttt ttccactcat taattaactt cccccttttt | gtctatcaga ttaaaaaaaa aataccaagg tagaaaaaat ttgatagact | gtttaattt gttgattcat aataatagta ttattaatta agtttcttt | tttgtactgt ggattatttt aatgaaggaa aactagctat ttgtgtgtca | aaaattcaaa atatttattc acctgttatt | 180 240 300 |
| aagacttcat agtaaatgat tctatttcta attgttttga agatatatta | ttatttttt ttccactcat taattaactt cccccttttt agcaaggtac | gtctatcaga ttaaaaaaaa aataccaagg tagaaaaaat ttgatagact | gtttaattt gttgattcat aataatagta ttattaatta agtttcttt ccaagataga | tttgtactgt ggattatttt aatgaaggaa aactagctat ttgtgtgtca atacaagttt | aaaattcaaa atatttattc acctgttatt gcaaaatcaa | 180 240 300 360 |
| aagacttcat agtaaatgat tctatttcta attgttttga agatatatta | ttatttttt ttccactcat taattaactt cccccttttt agcaaggtac | gtctatcaga ttaaaaaaaa aataccaagg tagaaaaaat ttgatagact cagagatgta acatataata | gtttaattt gttgattcat aataatagta ttattaatta agtttcttt ccaagataga | tttgtactgt ggattatttt aatgaaggaa aactagctat ttgtgtgtca atacaagttt | aaaattcaaa atatttattc acctgttatt gcaaaatcaa | 180 240 300 360 420 |
| aagacttcat agtaaatgat tctatttcta attgttttga agatatatta ctggttactc <210> <211> <212> | ttatttttt ttccactcat taattaactt cccccttttt agcaaggtac tatatttatc 5505 510 DNA | gtctatcaga ttaaaaaaaa aataccaagg tagaaaaaat ttgatagact cagagatgta acatataata | gtttaattt gttgattcat aataatagta ttattaatta agtttcttt ccaagataga | tttgtactgt ggattatttt aatgaaggaa aactagctat ttgtgtgtca atacaagttt | aaaattcaaa atatttattc acctgttatt gcaaaatcaa | 180 240 300 360 420 |

| ttgatttaac | taagaagggc | aggaaaaata | agggaaagat | catatttgat | gtggacatcc | 120 |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ccacagatag | tgttttcaga | ttatagctta | cacagaatgt | tagcataaat | atagttcaaa | 180 |
| tggctgaaat | attttacttc | ttagaattca | ttcattatat | tattactaat | ttaaggatcc | 240 |
| tggtgacaaa | tatgattgtt | ttaaatgaca | tcaaaagtgg | atgaatttga | ggtgtaaatc | 300 |
| tatattgtat | gtttgacttg | aaattggtga | gaacgacaag | aggggtcatg | tgataaatta | 360 |
| ttggcttttc | aactattgat | agattagttt | tgcgaattcc | tgcataagta | gattattata | 420 |
| ttgacgtggt | gatttgttta | gcagacattt | gtcatggaac | ctgcatttct | tccttcactt | 480 |
| attattgata | tatttaaaag | agtttggaaa | | | | 510 |
| | 5506 490 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| atttcgttca | ttttcgaatt | cttttcttcc | gtctttaacg | cgcttttacc | gtttatttaa | 60 |
| gccgttttct | cacctaataa | atgataaaat | gaatttcaac | cgatcatttg | tgttgtaatc | 120 |
| tcatttaatc | actcttaaaa | tgaaatctaa | ccgatcgttc | acgctataac | ctcggttaaa | 180 |
| caaaaaaagt | aaaataataa | taaaataatc | aaaatatctt | gaaaaataat | aataaaataa | 240 |
| acaaaatatc | tttgaataaa | ataaaacaaa | aaaatcaatc | ggacgttttt | tctttggaag | 300 |
| tttccttgaa | tgaattgatt | aataaccaaa | gtgaaactaa | gactaaaata | gactcacaaa | 360 |
| tcaagttttg | tccgaaaatc | actaaaaacc | gttttaaggt | ccaacgcctt | anacggtcct | 420 |
| ctttgctttt | atcggttaac | atggaccgtt | caaaagcata | aaatcaacat | gtaactttac | 480 |
| cgcttttgaa | | | | | | 490 |
| <210> <211> <212> <213> <400> | 5507 381 DNA Glycine ma | × | | e. | | |
| <4UU> | 2201 | | | | | |

tgttaaagaa cttcgaaaaa atcaagaaca agcttgttcg cacatcgttc gcgtgtatga 60

| catccactcc | acaaagtttg | aaattgaaga | gaccttcaat | cctattacac | aacgtggccg | 120 |
|----------------------------------|-----------------------------------|-------------------------|------------|------------|------------|-----|
| acaaaagtgg | gcagttaact | tgaatggtca | ttattgtcaa | tgcagaaggt | attctgcgct | 180 |
| tcactatcca | tgttcacata | ttattgcagc | tttgggttac | gtgagcctga | actactacca | 240 |
| atatatagat | gttgtttata | caaatgagca | catcgtaaaa | gcttactccg | cacaatggtg | 300 |
| gcctcttggg | aatgaagcga | ctattcctcc | ttctaatgac | gcatggacac | ttatccctga | 360 |
| cccaacagca | attcgtgcga | a | | | | 381 |
| <210> <211> <212> <213> | 5508 582 DNA Glycine max | <pre>all n locat:</pre> | ions | | | |
| <400> | 5508 | | | | | |
| cttggatctt | cttcatcaat | ggagtcctat | gcttcttgaa | ttttaatcac | aggggaatgg | 60 |
| aaaagaagaa | gagttgagag | gagacaccac | ttcaaggaga | agatgagtca | agaagaagct | 120 |
| caccaccata | gaaagccatg | gataagagct | tgaaggtaga | agaagatgaa | tggagggaga | 180 |
| gggagagaag | gagcacgaaa | ttttatgcct | caaaagaggt | ctgaactttg | aagtttaatt | 240 |
| ctcaaatgat | caaagttgaa | aaaattcaca | cacatggcct | ctatttatag | cctaagtgtc | 300 |
| acacaaaatt | ggagggaaat | ttgaatttct | attcaaattt | cacttgaatt | tgaaattgaa | 360 |
| tttgtgaagc | caaattttgg | agccaaaatt | tcactaatta | tgattagtga | attttagcta | 420 |
| tggttcagcc | cactaatcca | agatcaagtc | caagattctc | cactaagtgt | gcttaggtgt | 480 |
| catgaggcat | gntaagcatg | aaagacatgc | acaaagtgtg | actatatgat | gtggcaatgg | 540 |
| ggtgtagcaa | gcaaatgctc | acctcccctc | tcaaatttaa | tt | | 582 |
| <210> <211> <212> <213> | 5509 485 DNA Glycine ma | | iana | | | |
| <223> <400> | unsure at 6 | all n locat | TOUS | | | |
| tgatggtacg | ctaagcctca | catctcaggc | taagtgcata | ttgcagaaaa | gtttgcgttg | 60 |
| cagaaagtgc | taagcacagc | ttattgtgct | aagccccaga | tgctcactgg | actttacaac | 120 |

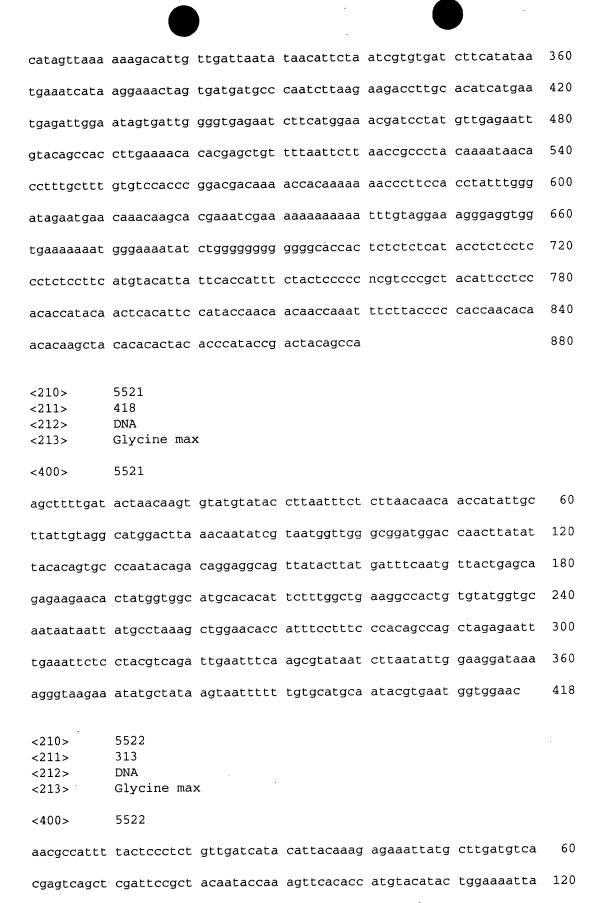


| | 5511 311 DNA Glycine max | |
|-------------------------|--|-----|
| <400> | 5511 | |
| agcttctgaa | ggaaactgcc tagtctataa atagaagcat gtgtgacact tgttgggact | 60 |
| ttgatgaatg | aaagtettat gagacacact teaaagette aettetete etettaaat | 120 |
| ccttcaattt | catgeteete cattgtetet ttettttaet eeattgaage ateetetgea | 180 |
| agtcacattc | ttgggggtga agetaettet tegatggett atteeettgt ggaeggggee | 240 |
| ttttctcacc | tattattctt tggctttcgc tgcatcttca tggcggaaaa ttaccgttga | 300 |
| aagacctgat | t . | 311 |
| <210> <211> <212> <213> | 5512 497 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5512 | |
| tctaggtcaa | tttattagca tgcaaaaata taagctaaag caagaaaagg gatgtgcttt | 60 |
| cgcgctagtt | gctcatccgt agcttggtct ttacgcatgc taaaaaagct attctttggg | 120 |
| acgtagaaag | gaaatatcct aattcagtag agaacgtagc tggtgcacaa gacaaaggag | 180 |
| gacaggaggg | gttcggggga ggagctctcg gcacatagtc agtcggcatg gtctttcatg | 240 |
| acccatangc | tttgggcttc gatggctgct tgaaagacac atattgggaa gttggctatg | 300 |
| gtccgtcgtg | cattgtgcag acgactgatg gcttacattg ccaagagggc attgtgagac | 360 |
| aaaggaaagg | gctgaaaagg atggtgccca ggatctcact attacctatg catgtgccag | 420 |
| aatgcgatac | cgtaaaggtc gatgtgtcat tgcgacactt accatgtata ccgggctaga | 480 |
| gtgttgttcc | accgaaa | 497 |
| <210> <211> <212> <213> | 5513 470 DNA Glycine max | |

| <400> | 5513 | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agcttgggac | attcttgcaa | atacctatgc | tagttctgat | aagttgaaaa | gagtcaagat | 60 |
| gcatactttg | aagcagcaat | tcgagctatt | acagacgaat | gagaaggaag | gtatagccga | 120 |
| atacctaaat | cgtgtgcaaa | atctgtcgaa | tcaagtgatg | gcttgtggtg | aaaccttgaa | 180 |
| cgatcaagat | cttgtagaaa | aggttttaag | aaccttaagt | tcaagatttg | attatgtggt | 240 |
| tgctgcaata | gaagaatcta | aggattttgc | ataaatgaaa | ttggatgagc | ttcaatgctc | 300 |
| tcttgaagca | cacaagctaa | gaataaaaga | gagggaaaca | gataggtcat | ctgaacaggc | 360 |
| tttacttgct | cagagtggaa | aaatattcca | caatggctca | cgcagtagta | aagggaaggc | 420 |
| taaacccaaa | taccctaaat | tgaaaaaaca | agagatgatg | gtactgttga | | 470 |
| | 5514 426 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tgcaaaccaa | atgctcacca | ctattagagg | agaaatcttt | aagttgtttc | atataaacct | 60 |
| cctcctctaa | atcaccatta | agaaaagttg | ttttcacatc | catctgttgc | aactcaaggt | 120 |
| caaaatgaga | aactaatgcc | aagataatac | gaagagaatc | tttcttagat | actggagaaa | 180 |
| atgtctttgt | gtaatctatt | ccttcctttt | gagtaaatcc | ctcaacaaca | agtcttgcct | 240 |
| tgtatctctc | aatgttgcct | aatgaatccc | ttttggtctt | aaatacccat | ttacatctaa | 300 |
| tggcctttgc | cccattangc | atctttacaa | ggttccaaac | tttgttactc | tgcatggaat | 360 |
| tcatctcatc | cttcatggca | tcataccata | aatttgactc | tttacaactc | gtggcttgat | 420 |
| ccaaag | | | | | | 426 |
| <210> <211> <212> <213> | 5515 115 DNA Glycine ma | x · | | | | |
| <400> | 5515 | | | | | |
| aacactgcct | gatgcatcga | ccaacaagtt | tgcacctttg | atatccctaa | agaaccatat | 60 |
| 2022022400 | taatgaggtt | ttattaacta | aaaaacaaaa | agggggggg | aaaaa | 115 |

| <210> <211> <212> <213> | 5516 436 DNA Glycine max | : | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 5516 | | | | | |
| tcgacacatg | agggaagata | ttgaatcagt | gagtgcttgt | agagttcaag | tttggagcat | 60 |
| aatttgcttt | gcaatttact | ttgtggtatt | tatagcagtg | tttactggaa | ccctagttca | 120 |
| ttaagtttat | tttttagttc | attggctaaa | gcaaagtact | gcatttgcat | tagtcttttt | 180 |
| ttaatagtcc | aacttctgtt | tttcttttc | tccctgttat | ggcattgtaa | ctcaaaacag | 240 |
| ttatttattt | gttatgttat | attaatagct | tatattatct | atttatttat | ttttctttcc | 300 |
| taaatcaata | caaagagtga | tgtgaaaatg | aaagagataa | gtacaatgag | aagctggctt | 360 |
| ctatttggtg | cacaactagt | ggtcttttt | ctgggggttt | ctcttataaa | cacgctgaga | 420 |
| gactgggtag | ctttgc | | | | | 436 |
| <210> <211> <212> <213> | 5517 339 DNA Glycine max | ς. | | | | |
| <400> | 5517 | | | | | |
| agcttctcac | tttttttc | atttgaattt | attgacagcc | aaaagccaca | tgcatgttga | 60 |
| gtggagtcat | cccattagtc | caaggttcct | ttttaattga | taggatatta | aacggtaaaa | 120 |
| tttgattgaa | attgttggca | aatactagct | ttagttggac | gtccaagtaa | aggccttttt | 180 |
| aatggttaat | ttgcttttaa | aaataatgcc | tataattggc | taaagtatgc | ttaagcataa | 240 |
| atggaaattt | tgtttttacc | aaatgaaata | aatttgagct | aattaacata | agtaatggtg | 300 |
| ttaattacct | aaatcattgt | gtaattaaat | taatccaac | | | 339 |
| <210> <211> <212> <213> | 5518 473 DNA Glycine ma: | × | | | | |
| <400> | 5518 | | | | | |
| tgcttgtgga | gcttctatgg | aggctggatc | tttgagcttc | aatgaggtcc | tttaatggtg | 60 |

| attttccacc | atagagatgc | agcggaagac | aaaggagaaa | aggtaagagg | cggcgccatc | 120 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| cactaaggaa | gaagccatgg | aagaaggagc | ttcgccacca | agatgagcct | tggataagaa | 180 |
| gcttggagag | gatgcttcaa | tggaggaaaa | gaaagaggga | gagaaagaga | gagggggaag | 240 |
| cacgaaattg | aaggaagaaa | aagggagaga | agttgaactt | tgagttgtgt | ctcacaagac | 300 |
| tctcattcat | caaagttaca | acaagtgtta | cacatgcttc | tatttataga | ctaggtagct | 360 |
| tccttgagaa | gctttcttga | gaaaacttcc | ttgagaagct | tctttgagaa | aactttgttg | 420 |
| agaagctaga | gcttagctac | acacacccct | ctcataacta | aactcacctc | ctt | 473 |
| <210> <211> <212> <213> | 5519 321 DNA Glycine max | κ | | | | |
| <400> | 5519 | | | | | |
| gcctctttga | atacacaaca | actaacaagt | attaaaattg | gaaatatata | ttgggtttag | 60 |
| ggtttacaca | cgaatggata | aaaataattg | gttgtgtttt | acaaatgcaa | ggttaagttt | 120 |
| gcacattggg | ccttaaagag | actacttccg | aatagccttg | gagacctatg | tagtgtttga | 180 |
| aagccatgaa | caatatgatc | actctacaac | atattgaaat | taaagcattc | tttgaaacaa | 240 |
| ctacacatgt | ggttgggcat | gtttttaaag | ttaccttata | caagaaacta | tttggcatgg | 300 |
| tatcaaagta | tgtgtttaac | С | | | | 321 |
| <210> <211> <212> <213> | 5520 880 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 5520 | all n locat | ions | | | |
| cactgaatcc | tcaactttcc | cctaaattct | tacattcttc | ataccccctg | tctccnncct | 60 |
| cccacaagcc | ccggnaanat | gatgcctgca | ngtgcancct | gacacttaga | gactcagcct | 120 |
| acatccatcg | tgtattacga | agcacaacga | ctgattctac | gaggatggag | taggatcaat | 180 |
| ctggatacgg | taattgcact | aaaccatgcg | atgcatatgt | gacgagatcg | aaaatggata | 240 |
| ccagaagaat | agcacaagac | tttttgaccc | cactaagagg | gacaatgaca | tcacatttct | 300 |



| | | | | _ | | |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tactgaccca | tgttccaatg | tacaattatg | agaattaatt | ctgactatca | tcctggacac | 180 |
| ataaactact | tgggaattac | cactccctag | caggacagaa | tactagtaca | ttgagctatg | 240 |
| tgcatccttg | cgaaacatgc | caaacctgca | aatcactgat | acatgccctc | tgtaactcct | 300 |
| tctcgaggaa | ttt | | | | | 313 |
| <210> <211> <212> <213> | Glycine max | ς. | | | | |
| <400> | 5523 | | | | | |
| agcttcatat | ttgtatgtca | gttggcatta | aaaaatttat | ttgactaaca | ttttgatata | 60 |
| aatcattatc | gaataacaaa | atttcacatt | ggttctggtc | ttttgtgaag | tagattcttc | 120 |
| taatttctga | aattttttc | ttttgggaaa | agggtggaaa | ctaaggagct | taagaaaagt | 180 |
| taattcctaa | tagccaacag | ttcatggcta | ggaattggga | aacctgctgg | gcgttaggct | 240 |
| gatttaatgt | gtttggttta | agccgtatca | aattccaatg | cacgttgaat | gcaatttcac | 300 |
| tcaaaagaag | ctttggcgtt | caacgtgcta | aacgtcaata | caagcagtct | tactttctgc | 360 |
| aattcaacat | actgtcttac | tgctgcctcc | tcaat | | | 395 |
| <210> <211> <212> <213> | 5524 240 DNA Glycine ma: | x | | | | |
| <400> | 5524 | | | | | |
| tccttgagaa | gtaaggaagg | tagcttcctt | gggaagttag | aggggggcta | ttcacacccc | 60 |
| tccaatagct | aagctctccc | tcatgccaaa | atacatgaaa | atacaatggg | aaacttcctt | 120 |
| gagaagcaag | gaaagtaact | tccttgggaa | gcaaggaaga | aaacttcctt | gagaagctag | 180 |
| agagggggg | gggggccctt • | tgaacgggtt | ttggctttac | tactgtcata | cgttattttc | 240 |
| <210> <211> <212> <213> | 5525 490 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5525 | all n locat | ions | | | |

| agcttattta | tttgattaat | gaatcatatt | gattattaat | taatgcttta | tttgttttt | 60 |
|------------|------------|------------|------------|------------|------------|-----|
| taataagcaa | aagtgatgat | atatattata | cacaaagggt | aagcaaccta | tttacaagta | 120 |
| ttgaaaactg | aaaatactat | ctccatacct | tggttacaaa | atattaacat | aacaacaata | 180 |
| taaatattaa | gtaaccaagg | aatccaaaaa | gagaaagttc | acctccctgc | aagtcactgt | 240 |
| aatactacta | gtgacaatcc | tacccaatca | ccaaaaaaac | ataaataatg | ccttaccctc | 300 |
| ccacatgttg | ttcccaaaat | attaatgctt | tatttgttgt | tgatgtatgc | aatgcaaggc | 360 |
| aattgtgaat | cccaatgaat | gaatgatttc | atgaatgaga | gcaagctgaa | tgatcctctg | 420 |
| aacagctctg | attatgtccc | aacctatgag | gacaangatg | gtgactggat | gcttgccgcg | 480 |
| aatgcccatg | | | | | | 490 |

| <210> | 5526 |
|-------|---------------------------|
| <211> | 941 |
| <212> | DNA |
| <213> | Glycine max |
| | |
| <223> | unsure at all n locations |
| <400> | 5526 |

60 aactgtccag gagtttgtta taactctcac taacatttac ctctattcat cgctctccac acgccaccta anacctcccc cctnctcntg ctaccgcncn ctttgattgc ctgccattac gagacactat acaatactca agcctcatga agatgatccc cgatgaaaca cgcagctttg 180 atgattataa aaagcccgat aaaatgaatt caggattcag gcattgcagc tacgactcgg attaacttta tgcgtcttgc aaaaaggatc cccaaggtac tagccccgag aatagtgtgg tctctcgaat cacgagaaag tgactttctc attgttgtaa aaaaacttag aatacatctc 360 ccggcagtag tgtaatcatc tcttaaaaaa cacacatatc acaaaggttg tttttcaaaa 420 tagatatact caaaattctc caagtcaccg ggaggtgtta ttatcttggg gttgataatc aacattccag aaattgattt cctgtggcct cgttctgcct tcgaaaaact ttaaccgcat gtgcaaagct ccaaaccagt tctaaaaggg tgcacctctg tccgggattc cggaatcgac 600 taaccaagca tgatagaatt ttcactctac ttcgggaaag cacatctctt cctaaaaatg gccagggaaa ctaataacat tttatgggaa tgcgatgtcg ttcgacacat acggcaaaat aattggggag gagggaggtc ctacccccgg cctaccccac ctatatcttc tcggaaaaaa

| ccatctctaa | tgggcttctc | tcctcccttt | acattctttc | ttatacacct | acaccccca | 840 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tccgctatcc | aataccactt | tcgaccccac | gctcttgatt | actctacgac | acactttcat | 900 |
| caatcacatg | aaaccatcac | ggtgtcctct | ccgtcttatc | t | | 941 |
| <210> <211> <212> <213> | 5527 382 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5527 | ll n locat: | ions | | | |
| ggtaattgat | canactcttc | caatntatgg | ntattttgta | gtgttataag | tattttctgt | 60 |
| taagtataga | taataaatac | ttagtacttc | cattntgtgt | gtttaataat | cattttctct | 120 |
| caatttcagg | ttaattaggc | aagctttgaa | aagtgttgtt | tťtcaccttc | tcgctaagcc | 180 |
| aatctgctgg | cttagcgagc | atccgctaag | cgcaacactc | atggnggcta | agcgcaagga | 240 |
| agactcttct | aattaagaag | gggggttgaa | ttaattattc | ctaaaccttt | actaattaaa | 300 |
| aatttactct | tctatggctt | ttactatngt | tgtaagtaaa | tgaagaatag | aacataaact | 360 |
| taaccaaaag | taaaagcgga | at | | | | 382 |
| <210> <211> <212> <213> | 5528 275 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| gctccttctt | ccatggctta | ttccctagtg | gatggcgcct | cctctcacct | attctccttt | 60 |
| gtcttccact | gcatctccat | ggtggaaaat | caccattgaa | gctcaaagat | ccagcctcca | 120 |
| tagaagcccc | acaagcaagc | ttccatcang | ttattaaagc | tatcctgagg | actttcgaac | 180 |
| tcgcaccagg | tctcanaatt | aactttgcaa | aaagcagttt | tggagcaata | agagtgcctg | 240 |
| atcagtggaa | gcaacttgca | gccaattact | tgaat | | | 275 |
| <210> <211> <212> <213> | 5529 412 DNA Glycine max | × | | | | |

| <223> <400> | unsure at all n locations 5529 | |
|-------------------------|--|-----|
| tcttttctct | ctttttctct caattgttct tcattcttct ccctcttttc acttatgttc | 60 |
| ttcctttntt | cttgcacaaa ttntgtggct cttctactgg tgatgatcat ggaaggctaa | 120 |
| acacaatcaa | tccaatgatc cactccaagc aaggctgaat ttaagttcta gtttagtatt | 180 |
| tcaattttgt | gtgaatgttt atcttttct tcaatcctat ntccaatttt catgattatg | 240 |
| aataggctta | ngattgaaaa ctaattangt tatggattca titcctaatt tcaaaattta | 300 |
| atcacaagtt | ngttggatga cattccaact aatttgtgat ctcaaagaat ttanggantt | 360 |
| aattcgatga | actaactcta atgacattga ttgaactttc ataacataat ca | 412 |
| <210> <211> <212> <213> | 5530 342 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5530 | |
| tattattaaa | gatgtttgat atttgatatt aatgaaccac tggataagtg gcacagtcag | 60 |
| ttatttatca | tttctgttta tagtgcgttg tcaagttgtt catattgtgc atgttactta | 120 |
| ttctgcctaa | cacttctact actgcatatt catagtttct agcttatttt cttgaaggat | 180 |
| ttcaatgaag | ttgtggtctt gcaactttaa ttcacagctt gcaaatgctc tatcaattga | 240 |
| aggggactac | cagggttcaa tctctgcctt anagtgtgga tatgtctgtg ctactgaagt | 300 |
| atgcttcccg | gagttgcagg tatgttgtca taggttacaa at | 342 |
| <210> <211> <212> <213> | 5531 406 DNA Glycine max | |
| <223> <400> | unsure at all n locations. 5531 | |
| tgttgagcca | ctagaaanat gtgaagcaag attaagagat aatgactgat taaaccataa | 60 |
| tgcagaatac | ggctgcagta gaatctgcaa taaaagaatt gtgatgaaca cttctggtgt | 120 |
| tgtacctctt | gcttcagact atgttgaaca tcatttgtag gggtttgttt tttcctaggt | 180 |
| ttaccgcatt | ccgtgaggta ccctgtttcc tggaaccaga tcaaaaccat acataggtga | 240 |

| gaaaatcttt | cttctaaata | attgtctaga | agtaacttat | tttgcctgtg | gactacagag | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| aaagatacaa | ttatattaaa | ttagaccatt | attattacaa | tattaattat | gtcaaacata | 360 |
| tatgctttcc | ataaaatcaa | ttctctgttc | atccatccca | ttacat | | 406 |
| <210> <211> <212> <213> | 5532 363 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5532 | ill n locati | ions | | | |
| ctaagcttaa | gaattatggc | ctcatcaaac | tacttgtttc | ccgagggaaa | ttctataaat | 60 |
| agacctccca | tctttaatgg | agtgggttac | cactactgga | aaacccgcat | gcaaatcttt | 120 |
| atagaggcaa | tagatttaaa | tatctgggaa | gccatagaac | aaggacctta | tgttccctct | 180 |
| atagtggccg | gaagtgcaac | aatagaaaaa | cctagagcag | attggactga | tgaagaaaga | 240 |
| agattatttc | aatataattt | aaaggccaaa | aatattatta | catctgccct | aggaatagat | 300 |
| gaatacttta | aggtttcaaa | tngtaaagtg | ctaggatatg | tgggatcact | acagtaacac | 360 |
| atg | | | | | | 363 |
| <210> <211> <212> <213> | 5533 402 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| tccatcagtg | cataacgtga | cttcaaaagt | atttgctntt | ccctttntat | attnttatan | 60 |
| ttttttgggt | tcgacaaggg | ttgatgcaat | cctaccccgc | aagggcattg | gatagaagac | 120 |
| tccaagacaa | ttgagccaga | gatgcaagag | aaggccctag | agttctcatg | agccttangg | 180 |
| tagatttcgg | gctcatgggc | taagtatgag | cccacttato | ttagtacata | ttagattaag | 240 |
| gtttcattat | ttttgggcct | tgtatttagg | gctcaataat | gtaggtaagg | taccctagaa | 300 |
| atgtatgatt | tttcagccct | tgtattttag | ggcacctaga | ctagttnttg | ı tattangggt | 360 |
| agttttgtaa | tttcacatgc | attaagtgaa | tatttgatgt | gt | | 402 |

| <210> <211> <212> <213> | 5534 363 DNA Glycine max | |
|-------------------------------------|---|-----|
| <400> | 5534 | |
| ggaccttcaa | actcagcgtt caatgcagca gcttctaacg agggatgtat tcatattgga | 60 |
| gaatacagag | aggcaggtat aatgacgaac agaaatggat aatagagtac tctggtgaag | 120 |
| aacaggagct | ttcctccttc ttagcttgtc tcacaacaaa gggtagaacc ttaatatcct | 180 |
| tatcggctac | ttgcgccccg tcttttaatt tatgcattgc tgaaatgaat gctcgtgcat | 240 |
| aaatatatct | gcatgatgaa aatgtctgtt cctagcttgt tgtttttatt ataatttgat | 300 |
| acccagatat | atacaagatc aatttgcacc caaatatata agattttaat ttatctcatg | 360 |
| ttt | | 363 |
| <210> <211> <212> <213> | 5535 400 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5535 | |
| tcaggaaaat | gggagtacta gcctaggctt tggctcttag aaaaacaaca cttattgtag | 60 |
| gtgaaatgct | tggaccaatg gaaatgcaag gcttaatcct tatcttctta atctaagcac | 120 |
| tttgaatgac | cattaatatg actaatcggc agcttggaca gccattgatg tgctctccac | 180 |
| aagctcagcc | atgccttata tgacttcttg caatttttca aaactaacta taaaaggata | 240 |
| aagtagagtt | ttaccaaana tggtaaaaaa tgcttttgct aaaattggta aatcttatcc | 300 |
| taatattcta | gaatagtgtg ttaacctccc ttgagacatg tatactcaga gtgaaccttg | 360 |
| cacagagtcc | actcacactc atacagagac aaaatatact | 400 |
| <210> <211> <212> <213> <223> <400> | 5536 464 DNA Glycine max unsure at all n locations 5536 | |
| | ctatcattga tacgtgtaag tcccacaagt ttgatttaca tttgcaagct | 60 |

| gtctgtcttg | tgcttgaaag | ataaagatct | tggtgacaga | gcattcacga | ataacgaaat | 120 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| ctgggataca | accagaaatt | tgttactttt | ttaatttatt | attgtttaaa | taaggctaaa | 180 |
| atatatttt | ttattcttaa | taaatattca | caatttatgt | tgatttctga | gcatgtcacc | 240 |
| actgaataaa | tggaggagaa | acatcatctc | catttgttgt | tctattcatt | tcttccattt | 300 |
| ctatggntnt | gaaaaaataa | atggtactct | tcaattaatg | agttacatgt | cgtccattac | 360 |
| atttatctat | ccaaaactnt | agtaatgaga | agagtgaaga | gaanaataat | tggagaggat | 420 |
| aagtagcttt | ctgtccagac | tgaattatgt | gttttttaat | taat | | 464 |
| <210> <211> <212> <213> <223> <400> | 5537 307 DNA Glycine max unsure at a 5537 | k all n locati | ions | | | |
| tctttggacc | tcgaacaagc | aattaactcc | tctttcagaa | ccatgctatg | tgctcgcgac | 60 |
| tggtctcttt | cttcccttcg | caacttgagt | tcactattgc | taccccatag | agctccgcga | 120 |
| aatttgtttc | ggccatactc | ttccttgcga | gccctcttgg | tctcttgttc | aagggctctt | 180 |
| gcggtaattg | cattctcttc | ccgtaacccg | gcacactcct | tccgaacgtg | tgtagcggcc | 240 |
| aacttgaact | tctccttggc | aagttttgcc | tttcctaact | cgcttttgag | agctnggact | 300 |
| tcttcgt | | | | | | 307 |
| | | | • | | | |
| <210> <211> <212> <213> | 5538 468 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tctagccaaa | tggacttacc | ttgaattaat | tcctttgata | tgccctttga | gccttgtttc | 60 |
| cctttccttg | ttttgaatct | ctctacaagc | cttaaatgaa | aaaccatgat | atcaccatat | 120 |
| ccttaaggaa | ·ttttggagct | ttggaattgt | tttgggaata | agtgtggggg | gtttttgttt | 180 |
| cattggataa | cttgttttgt | tggctatgct | tcatgatgta | ttttgggcca | tacttgatgt | 240 |
| acattgtata | ttggttaaat | gttggacatg | ctgaatgaaa | tgttgtttct | canaggctat | 300 |

| agagtaaaaa | aaaaaaatat | tcgaaaaaag | aaaaagaaaa | gcaataaagt | tgagtgaata | 360 |
|----------------------------------|-----------------------------------|-------------|------------|------------|--------------|-----|
| agatcttaaa | tggcacaaga | atgatgaaac | tcttggttct | actctttgat | gttaaatnta | 420 |
| tctttacttc | tttttatttc | ttaatttttc | taatatgcac | ttattccc | | 468 |
| <210> <211> <212> <213> | 5539 377 DNA Glycine max | k . | | | | |
| <400> | 5539 | | | | | |
| gattcactaa | tcattaacca | gttttgaaaa | aatgtgtata | cacctaaagg | gtgaatgctg | 60 |
| tgaaaatttt | cccgaacgcc | caaaatagac | tcggatgaat | gcatgaattg | ataaaagaat | 120 |
| atgctttgga | aacactgggt | tgacttaaat | agggaaaatg | aatcttgagc | cctagtgtca | 180 |
| catgaccata | aaaacttgat | gcttgagtgt | ccacatgggt | gcatgcatga | tcagttttgc | 240 |
| ataaaatttc | ctaattatca | ttattgcatg | tgtgtcatgg | aaataatgtg | ggacatecee | 300 |
| tttatccctg | aaccgctggt | caaaccaacg | ctctgacata | tatcatgtcc | atccgttcta | 360 |
| caagccttga | gccaaag | | | | | 377 |
| <210> <211> <212> <213> | 5540 422 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5540 | all n locat | ions | | | |
| cacttctgta | gggtttcagg | gctttccatc | agctctgttt | aatctgccat | atactcagcc | 60 |
| ggtattaggc | ctcatgagct | ttctcatatt | cagcagctta | ttggatttag | cttgngtgac | 120 |
| ttccctttca | gatacttggg | tgttcccctt | ttatcatcta | gattaaatgt | atgtcattat | 180 |
| gctcccttac | tttccaagat | tactggcctg | attcagggat | ggagcaaaaa | gtatttatct | 240 |
| tatgcaggta | agttagagtt | gatcagagcg | cgtattcaac | gaattgtgac | : attttggatg | 300 |
| gggatttttc | ctttgccgca | atctgttctg | gaccggatca | acgctntgtg | ccgtaattnt | 360 |
| ctgtggngca | aagcggatat | tggaaaaaca | agcccttggt | tgcttggtca | gtagtttgtt | 420 |
| ct | | | | | | 422 |

| | | * |
|----------------|--|-----|
| · - | 5541 346 DNA | |
| <213> | Glycine max | |
| <223> <400> | unsure at all n locations 5541 | |
| agaaaataga | cgaagaaaca tgccgganac acattggcag cagatggaaa atgactgaga | 60 |
| aacattcaaa | gacaattgga atatgttgaa ccattaagaa gaagccacaa cacaatgctt | 120 |
| aaccacttaa | cagaagcaaa cacacttaac cacctaaaag gtagaagcaa accanagctt | 180 |
| aaccatcaag | agcagaagct aaacatggtg tttaaccact caagacagaa ggaaaacaca | 240 |
| atttttgaat | gcttaaccac tataaaggca gaagcaacac aacaatgttt aaccatccat | 300 |
| ggtagaagct | ngacatcaat gcttaaccac catggacaga aactta | 346 |
| <210> | 5542 | |
| <211> | 172 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <400> | 5542 | |
| tactcatttg | caagctacgg cttatatgga ccagacaggg ctatcaactc tagttacaat | 60 |
| gcggtattct | accacaaata aatgctgagt gaatgcctct tgtgataggt gtcactatga | 120 |
| gacatcttgc | ttccacctgc ctatcataga gatgatcatc actctggatt at | 172 |
| <210> | 5543 | |
| <211> | 387 | |
| <212> <213> | DNA Glycine max | |
| <213> | Glycine max | |
| <223> <400> | unsure at all n locations 5543 | |
| tacttctact | gaagctgagt ttctaccctc ctcctgttct gacatataat ctctagtgca | 60 |
| gctgaaggat | gttctagggt tctcgatcat tccgattcag tccttgattc ttattgatct | 120 |
| ttgtcttcgg | ggtatctctc attaaataaa tatcaatgaa caatatgacg gattatctgc | 180 |
| gtttcctttt | tctggtctcc gagacaagat aatgattttc attggtctca ttattcagta | 240 |
| tttggatttg | tacatcttta ttggttatta tctattcatt cattatattg gtgaacttaa | 300 |
| | | |

| agtttttcta | cataacaata | tttgatgcac | aaatanaata | aaatgattag | aacttaaggt | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| attaattaat | aattattatc | tcattta | | | | 387 |
| <210> <211> <212> <213> | 5544 579 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| cccctggcga | acactctgaa | cactaaccga | ccgcgaccgc | tactgccacn | cccagccnnn | 60 |
| ncnngnnnaa | tgagcccttg | acccctcgat | tcccggacca | ccaaacnaag | ctggcaagat | 120 |
| aggagaccac | agcattttca | cgccttttac | cgagggccac | acagagacac | acgacctntg | 180 |
| tgagacactc | ctaccacaca | gacaataaag | accatagcga | aacaccataa | gagagacgta | 240 |
| gtgccagaac | ataggaatca | cattcagcag | gaacaaatga | ttgggacaat | accaacatta | 300 |
| aaaaccatgg | tgacatagca | aaaaccacgc | gcagcanaaa | tgcataaacc | caaacagggg | 360 |
| aagaacaaga | caattgcaga | cattagcaaa | accttgtggg | ctatgaaacc | agggcataca | 420 |
| ggagcaatcc | cgcaaaaaac | gtgacgaaat | agaaactgct | ataaagagga | aatagcacca | 480 |
| cgcccgaag | cccacaaaca | gaaagggacc | agaccaaaac | tggccaaccg | cgaacaaacg | 540 |
| aatcacccac | gtctaagggt | tacccacatg | aacggcaan | | | 579 |
| <210><211><212><213> | 5545 353 DNA Glycine max | < | · | | | |
| <400> | 5545 | | | | | |
| gactcctcta | gaagatgcat | tgctcactaa | gtatattcaa | actcatggag | aaggccagtg | 60 |
| gagatcacta | ccaataagag | ccggtaataa | taatatacta | tattagcttg | ctgcccattc | 120 |
| atttcttacc | ctagccagct | acctctctat | atatgatacc | tcctcttgat | caccttttca | 180 |
| tgtttaatcc | ggcttcctaa | tcttctgatc | tcatattggg | gtcgtgatta | gatctatttt | 240 |
| tggcgacact | agtcctcatt | tgtgtgccct | tcgttataat | catagctata | tattattcat | 300 |
| agagtaacat | gtcatatctc | ttctttctct | ctctttcatc | ttatatttt | tat | 353 |

| <210> <211> <212> <213> | 5546 370 DNA Glycine max | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|-----|
| <223> <400> | unsure at all n locati 5546 | ons | | | |
| gaagcttctc | aaggaagcta cctatgctat | aaatagaagc | atgtgtaaca | cttggtgtaa | 60 |
| ctntgatgaa | tgagagtctt gtgagacaca | tttcanagtt | caacttctct | ctctctttc | 120 |
| ctccttcaat | tttatgctcc cctcccctct | ctctctctt | cttttcctcc | attgaagctt | 180 |
| cctctctaag | ctttntatcc aaggcactct | cttagtggtg | aagcttcttc | ttccatggct | 240 |
| tatttcctag | tggatggcgc ctcctctcac | cttttctcct | ttatcttccg | ctgcatctcc | 300 |
| atggtgggaa | aatagcatng aaggacctca | ttgaagctca | nagatccaac | ctccatagaa | 360 |
| gcttcacaag | | | | | 370 |
| | | | | | |
| <210> <211> | 5547 121 | | | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |
| <223> <400> | unsure at all n locati 5547 | lons | | | |
| taggcacgta | aacttcanat gatcaaatct | cttgtgccat | atccatgaat | cactaaccac | 60 |
| ttgcacatat | taacattgat tatcagcagt | attaatttga | atatgagagg | tcctattttg | 120 |
| t | | | .* | | 121 |
| | | | | | |
| <210> | 5548 | | | | |
| <211> | 294 | | | | |
| <212> <213> | DNA Glycine max | | | | |
| (213) | Glycine max | | | | |
| <223> <400> | unsure at all n locati | ions | | | |
| <400> | 5546 | | | | |
| tatagctgag | gttggccaag caggaacata | gttcanacct | tcaaaactta | ccatgacatc | 60 |
| tttgtgcana | actgttgatt tgttaactaa | taataatcat | ttaggtctca | cçaagtaaga | 120 |
| tgcccatatc | tcattagctg gaggaggagg | ctgaacccaa | tgccctggta | tgcggctgga | 180 |
| tgaagttgca | aggaaacaaa atcaaataag | ataaaatgct | ttattttcat | tnttcacact | 240 |

| tcataanaga | cattagaaaa | accaatacag | ttgcagataa | gccacataac | agcg | 294 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5549 378 DNA Glycine max | ς. | | | | |
| <400> | 5549 | | | | | |
| accctgatga | ggatgtccca | tatgttctta | taactggact | gattcatttg | cttccaaagt | 60 |
| ttcatggcct | tgtaggtgaa | gacccgcaca | aacatttgaa | agaatttcac | attgtctgct | 120 |
| ccaccatgaa | acccccagat | gtccaagagg | atcacatatt | tctgaaggct | tttcctcact | 180 |
| cattataggg | agtggcaaac | gactggctgt | attaccttgc | tccaaggtcc | atcacgagct | 240 |
| gggatgacct | taagagagta | ttcttagaaa | aatttttccc | tgcttccagg | accacagcca | 300 |
| tcaggaaaga | tatctcaggt | attagacaac | tcagtggaga | gagcctgtat | gagtactggg | 360 |
| agagatttaa | gacactat | | | | | 378 |
| <210> <211> <212> <213> | 5550 428 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5550 | all n locat: | ions | | | |
| gtcctgcctt | cttcattcct | agttctcgtg | aagtttaatg | ttagtgcaga | gaacctttgg | 60 |
| tgcctggtgg | attaaaccat | ttncaaagct | gaaaggcata | caaaagttca | aacgaaacaa | 120 |
| ggtaaggaaa | atacttcttt | tttttatgta | tagataaaat | aattcgctat | aacaacaaaa | 180 |
| ctctccctga | gtatttaatg | cgaatgtata | cctaanaact | tcaatatctn | ctagaacaat | 240 |
| tatgcgctaa | ttatttcacg | ggttcaataa | taatgataat | aataataatt | tatcatgaac | 300 |
| catagtgtga | cccaagccct | gtaatcaatt | aattatactt | tngtggtttt | caattaactt | 360 |
| | | | | | | 420 |
| atctcaatta | tttacactan | gtgatgaaat | gtttcaagcc | aagctagtca | ttacatttta | 120 |
| actacatg | tttacactan | gtgatgaaat | gtttcaagcc | aagctagtca | ttacatttta | 428 |

| | unsure at a 5551 | ll n locati | ons. | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atgtgttaac | tctcaagctn | tntatgatta | tatctgtgtg | aaatataaaa | aattcataaa | 60 |
| attactaata | tttaaggtag | tatatgctta | tcatttaagg | taaaatatgt | tnttaatttt | 120 |
| tatacttttg | atcaaattta | attttagtcc | tttgtaatat | gttaaaaatt | taaagggatg | 180 |
| tcgcgaaaag | gatatataaa | cgaaataata | taaattttaa | catttatagt | catattaaaa | 240 |
| ttcacattta | atgtcatcta | ataaatatta | ttaattttca | atactattta | gcaagccttc | 300 |
| ttctcaccac | atttaattta | atgtcatcta | ataaatatta | ttaattttca | atactattta | 360 |
| gcaagccttc | ttctcaccac | atttaatgtc | gatcaattaa | cnaattaaaa | taataaacaa | 420 |
| ttaataa | | | | | | 427 |
| <211> | 5552 330 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| cttctcgatc | tattatgcgc | ctgaatcgga | cctncgagnt | attagttatg | actattaaga | 60 |
| tatctcaaga | gcttccggtg | gttaattgcg | tgcgtctcga | tatattatgt | gcctgaatcg | 120 |
| gacctctgag | ctaaaagnta | tgaccatttg | aatttctcga | gagcttcctg | tgttcaattt | 180 |
| catgcgtctc | gatatattat | ntgcctgaat | cggacctccg | agttaagagt | tatgaccatt | 240 |
| tgaatttctt | gagagcttcc | gatgttcaat | ttcgagcgtc | tcgatatatt | atgtgcctga | 300 |
| atcggacctg | cgagtgacta | tttatgacca | | | | 330 |
| <210> <211> <212> <213> | 5553 254 DNA Glycine max | x | | +1 | | |
| <400> | 5553 | | | | | |
| aagactgtat | aacgaatgat | gaacgtcgaa | gaacagacga | aaaccttcgc | gaaatcactc | 60 |
| acggaaacgt | tacggaagcg | cctcggcttg | gattgtcttc | acggaactaa | atctcctcag | 120 |
| ttattttgag | aaagagagaa | gtgcctaagg | tgctgaaccc | ttttctactt | cacttctcca | 180 |

| cctatttata | gaaaattcgg gg | gagaagett | gccacccagc | tcgtccaggc | gaactcagct | 240 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| cgcccaggcg | agca | | | | | 254 |
| <210> <211> <212> <213> | 5554 360 DNA Glycine max | | | | | |
| <223> <400> | unsure at all 5554 | l n locati | ons | · | | |
| tgccacaatn | tccatgaaat gt | aaggccat | cgtatgagtt | gtataatggg | aagggagcat | 60 |
| tcccaagtga | attcctttag aa | anagcaatc | aacgatgact | aanatagtag | tatgtctgca | 120 |
| gtacactagt | aaaccaacga to | gaagtccaa | agaaaggtcc | tccacagccg | ggacggcact | 180 |
| ggcagggggc | agagcaacct gg | gcgggcttt | cgggcttcat | atttagtgtg | ctggcaattg | 240 |
| atacaagctg | caacaaacgt tt | tgcacatcc | tttcttaacc | ctatccaagt | gaaatttttg | 300 |
| cacacccgtg | caagggtctt ca | ataataccc | atgtggccac | ttgtgggcat | tgaatgaaac | 360 |
| <210> <211> <212> <213> | 5555 268 DNA Glycine max | | | | | |
| <223> <400> | unsure at al: 5555 | l n locati | lons | | | |
| ctacatacgt | gcacgtgagc ta | aaatttaaa | ggtgggcaac | tggggatggt | gtgcttatgc | 60 |
| ctggtttgtg | gaaatgggat a | gctgatttg | tgccatcgct | cgatcgccac | ctattgccac | 120 |
| atatgaaggg | tgccccataa to | ccaataagc | ttggtgtgag | aaagcatgga | agagtcagac | 180 |
| ttcctacttt | atttgttgac ca | acagagtgg | tacctagaga | tatgtcgcgg | tggttaggag | 240 |
| accttgtgga | cgtccngtgg g | gtgctat | | | | 268 |
| <210> <211> <212> <213> | 5556 274 DNA Glycine max | | | | | |
| <400> | 5556 | | | | | |
| caaagaaatg | aaaagccctc a | attgtggtg | gctattatct | ctatagtgat | tcactcaatt | 60 |

| t at aat t | ottagtggaa | tagcgtctta | atataattaa | ccicttactt | cttgactcga | 120 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | | | | | | |
| cttcttcaag | ggatggcacc | aatccttctt | tctaattgct | tatatggcaa | ctcacaaacc | 180 |
| aggaagcata | gagacaagta | ataacccaag | acccaaaaga | tgaaatgaaa | gctaaaccaa | 240 |
| tagatcttta | acaagagata | ttatcaagga | ttat | | | 274 |
| <210> <211> <212> <213> | 5557 382 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| actaagctgg | tacaaacctt | cactacatca | accgtaataa | tcatcctctg | actgctatcc | 60 |
| tgaatcaaac | atgaattagg | aaagaaggtt | aacttgcaat | tcaatacaga | aaccaatttt | 120 |
| gatatagaga | ttaaattgaa | attaaaagat | ggcaagtata | gcacatcttc | taagtgtaaa | 180 |
| aactcagtaa | atttgactgt | tccaaagtgt | gtgactatga | cttgntgacc | agtaggcagg | 240 |
| cgaactacta | tgggatttat | ttctctatat | gtagaataac | aagtcaatga | ggatgcaaca | 300 |
| tgaattgtag | caccaaagtc | caaaatccat | gctgcagctt | canacttgtg | aatattacaa | 360 |
| acaaaggata | gtatattacc | ta | | | | 382 |
| <210> <211> <212> <213> | 5558 422 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5558 | all n locat | ions | | | • |
| ctattacgga | cctatgaaac | tcagcttctt | tactgcgttg | atgccattca | cgttaaataa | 60 |
| ttcttatgaa | ttntacagat | ctttcatcgc | taaagtaatt | gtgacaatgt | ttgntattat | 120 |
| tatttcatgt | atcatttgat | ttattggtag | tctaattcat | aattcctggc | ttgtgtctac | 180 |
| ttttattgca | ttaacttctc | tgagcattga | atactttagt | gctcaacata | gattcatact | 240 |
| ttattttgtg | tgcatatttt | actactaagt | aatttttatg | acaaaattat | gcagttgagt | 300 |
| gttctgggat | gtacaagact | cagtatttga | gggtattgtg | actatttat | aagctacaag | 360 |
| tctatggata | cccaacgggt | gaagcatcgt | acttcttcat | tagttgtatt | gataaattca | 420 |

| ct | | | | 422 |
|-------------------------------------|---|------------|------------|-----|
| <210><211><212><213> | 5559 84 DNA Glycine max | | | |
| <223> <400> | unsure at all n locations 5559 | | | |
| atgatttaat | tttcttacaa atcatgaatg aagaacgacc a | antcttggag | ttggatactt | 60 |
| agattagaag | ggatgagggg ggtg | | | 84 |
| <210> <211> <212> <213> <223> <400> | 5560 419 DNA Glycine max unsure at all n locations 5560 | | | |
| cgaggtactt | acccgttgaa gatcgaagaa cgatgatgaa c | cgaatgaaga | acgtcgaaga | 60 |
| acggttgaaa | tctttgcgaa attcctcacg gaaaacgtta (| cggaaacgtt | teggaagege | 120 |
| cttggcttag | attttcttca cggaaacaat ttttccaagc a | aaattcgaaa | gagagagaag | 180 |
| tgcctaaggg | gctgaacccc ttccttcttg ccttcctccc (| ctatttatag | caaaataggg | 240 |
| gaggtggttg | ccgcccagct cgcccaggcg agctcagctc | gcccaggcga | gctcagctcg | 300 |
| cccaggcgag | cagggttgct teetecagaa geaacegeet | tctggaggaa | tattccggag | 360 |
| ggcccaagtg | ggcctgggtg ctatttgcac ccncattttt a | acttaagtac | accccctct | 419 |
| <210> <211> <212> <213> | 5561 441 DNA Glycine max | | | |
| <223> <400> | unsure at all n locations 5561 | | | |
| cgtgacacta | tgaaactcag cttctaagga agttntctta | agaaagcttc | tcaaggaagc | 60 |
| tacctagtct | ataaataaaa gcacgtgtaa cacttgttgt | aactttgatg | aatgagagtc | 120 |
| ttgtgagaca | a caactcanag ttcaacttct ctccctttnt | cttccttcaa | tttcgtgctc | 180 |

| cccctctct | ctttctctcc | ctctttcttt | tcctccattg | aagcatcctc | tccaagcttc | 240 |
|----------------|-----------------|--------------|------------|------------|------------|-----|
| ttatccaagg | ctcatcttgg | gggtgaagct | ccttcttcca | tggcttattc | cttaatggat | 300 |
| ggcgcctcct | ctcacctctt | ttcctttgtc | ttccgctgca | tctccgtggg | ggaaaatcac | 360 |
| cattaaagga | ccccattgaa | actcanagat | cccagcctcc | cacaagcaag | cttccatcaa | 420 |
| gtggtatcag | aattaaataa | C | | | | 441 |
| 210 | 5562 | | | | | |
| <210> | 5562 | | | | | |
| <211> | 544 | | | | | |
| <212> <213> | DNA Glycine max | v | | | | |
| <213> | Grycine maz | x. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| atgagacatt | gatnacgnga | actatgtcta | ctcaagctga | ttttgtgatg | anangcgttt | 60 |
| | | tcttctctat | | | | 120 |
| | | aactacgtat | | | | 180 |
| | | | | | | |
| tggatgctga | aatagaccga | cagttgctga | gaatgatcta | ataattgata | atctactgcg | 240 |
| aanggctgag | gaataactat | taatgataca | ttgaaatgat | acaccttctg | gtaagtaata | 300 |
| ctttaattta | aattttagac | taactagata | tcgcttcata | tttttaacga | tacactgcct | 360 |
| tcaatcaaat | ctaaatgtca | agccattaac | tattaaagat | actgagaata | ttatctatat | 420 |
| ntattaaata | aaatatgaat | acactttgtg | atttccttgc | agatgatttc | ggaaatacaa | 480 |
| agccgggaag | gagcattgtg | attctatatt | taacgacatg | tactgatgca | atattgcatt | 540 |
| acag | | | | | | 544 |
| | | | | | | |
| <210> | 5563 | | | | | |
| <211> | 451 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 5563 | | | | | |
| | | | | | attactata= | 60 |
| | | | | | cttactatcg | |
| ccatatagtt | tggcgaatta | tatcaaattc | aagttagaca | acattattt | caatatttga | 120 |
| ctcattgtat | taagttgaat | atgacaattc | tattattatt | tgtatctaaa | gataattatt | 180 |

| | • | | • | | | |
|-------------------------|-----------------------------------|-------------|------------|--------------|--------------|-----|
| ataaaattca | atacatttac | attacattcc | ctacaagaat | tataatacat | aatattctat | 240 |
| aatattttat | aatttgatga | ccataataat | gataaaatgc | attacgctag | ttaactccac | 300 |
| tgaaaccttn | tcaatgaaac | ttatgtctct | aacatataat | atcatattaa | atatgaataa | 360 |
| ttttagtctc | atgtacgtat | gatataatat | ggacttaact | cataaaatnt | tgacttttac | 420 |
| attanctcac | gcttataaaa | atttcttgcc | С | | | 451 |
| <210> <211> <212> <213> | 5564 318 DNA Glycine max | × | | | | |
| <400> | 5564 | | | | | |
| atctaatcat | tccaatccac | ataaatctta | caattgctca | ttcaaatcat | tctcaaacac | 60 |
| tcatttcata | caaaataatc | cactgcatat | caaattcaac | cagttcactg | ttcaaacacg | 120 |
| ctctttgtac | aagcaaacaa | ctcaaagtgc | caaaagttat | agaactgaaa | cataaacatt | 180 |
| gaacattaaa | tgactgaaca | taaatcataa | aataactgaa | ataaactaaa | atgttcaaaa | 240 |
| tgcacaaatt | taaatgtcct | gctcctgtgg | gtgctcttgt | gcatgctcat | taagatccaa | 300 |
| cacctgagca | actggtga | | | | | 318 |
| <210> <211> <212> <213> | 5565 416 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5565 | all n locat | ions | | | |
| ngaaggcatg | taacccacca | tcttctcata | ttagaacact | gttaacgtgt | ccactatcan | 60 |
| ttttatcatc | tcgctttcca | tcattgnggg | cactacttaa | ı gctgccagat | ccctccacct | 120 |
| ctgggcgtat | tctttgaatg | attcattato | tctcttgcac | atgttctgta | gctgcattct | 180 |
| atctgcggcc | : atattggaat | tgtaccgata | ctacctaato | g aaggcaacca | ttaggtcctt | 240 |
| ccaggaatgg | atccaagaag | gttctagatt | agtataccag | g gtgacggctg | g ccccagtaag | 300 |
| aatttcttgg | , aataaatgca | tcaacacatt | ttaatctttc | gtgtatgcco | ccattntcct | 360 |
| acagtacato | ttcaggtgat | tcttggggca | agtagtccc | ttgtacttat | cgaaat | 416 |

| <210> <211> <212> <213> | 5566 476 DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 5566 | |
| actcagctta | acattcanat tcgagcgtgt cgttatatta taggactcag tcagacatcc | 60 |
| gagtaaaaag | ttattgacgt ttgaatctgc tcagagcttc aacactcaat ttcgagcgtg | 120 |
| tcgctatatt | acgggactat atcagacatc cgagtaaaaa gttattgtcg tttggaattg | 180 |
| ctcagagctt | caacattcaa tttcgagcgt ctccatatat tacgggactc aatcagacat | 240 |
| ccgagtaaaa | agttattgtc gtttgaattt gctcacagct tcaacattca aattcgagcg | 300 |
| tctcgttata | ttatatgact cagtcagaca tccgagacaa aagtattgac gttgaatttg | 360 |
| ctagagctta | acattcatnt cgagcgtgcg ctatatacgg gacatatata catccgagta | 420 |
| taagttattg | tctttgaatt gctacagctc aacattaatt cagcgtgcga tatata | 476 |
| <210> <211> <212> <213> <223> <400> | 5567 473 DNA Glycine max unsure at all n locations 5567 | |
| | gatgctacat ggacacatgt gttggacatc attagtatgt ctgcatggtc | 60 |
| | gtatgaagtt ctggctggtt ntagttntac cgattggttt tgtaattatt | 120 |
| | aataggaaag gatcctaaaa aactagttat ttcttctggg tggagataaa | 180 |
| | aagggaaaag aagttacttt gatgttcaat tgagtttatg atcctcttga | 240 |
| | ggtgtgcgtt tgaatcggag aagtacatgc agcgggttat tttactgttc | 300 |
| | cangaaacag aatggctcat gaattaattn ttgaagaggt tgttggtcat | 360 |
| gtaattgaga | atccgtttga gaagtggaan aagaaaaatg tggcaagagt attattattg | 420 |
| | gtnaacctgg agactgtttt gattgaaagt gtaccataat tta | 473 |
| <210> <211> <212> <213> | 5568 211 DNA Glycine max | |

| | unsure at al | l n locati | ons | | | |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <400> | 5568 | | | | | |
| tncttgagaa | gctagagctt a | gctacacac | acctctctaa | taactaagct | cacgtncttg | 60 |
| agaagagaag | ctagagctta g | ctacacacc | cctataatag | ctaagctcac | ccccatgaca | 120 |
| aaatacatga | aaatacaaaa a | aaaagtccc | tactacatag | actactcaaa | atgccctgaa | 180 |
| atacaaggct | aagaccctat a | ctactagaa | t | | | 211 |
| <210> <211> <212> <213> | 5569 431 DNA Glycine max | | | | | |
| <223> <400> | unsure at al 5569 | l n locati | ons. | | | |
| taagaattgg | aggtcctaat g | gattccttga | ggaggtccaa | acattaagcc | tttgaattgc | 60 |
| cccaagtatt | acgtgtaata t | cgcttgacg | atgtcaaaat | tcacagacga | aggtagctct | 120 |
| tcatcatcca | tgttcataag a | aacaacgct | cctcctgaga | aagtcttctt | caccataaac | 180 |
| gatccttcat | agtttggggc (| ccatttacct | cggtgatcct | tttggacatg | cgacactntc | 240 |
| ttcagaacaa | gatececete q | gctgaactta | cacgggcgca | ctcttcaatc | aaaaacgttn | 300 |
| ttcactctgc | actaatatag t | ctcccatgg | cttatagtag | ccaatctcat | accctcgata | 360 |
| agaattaatt | ggtcaaagca t | tgcctgggcc | cactctgctt | cttccaatcc | taactctgct | 420 |
| aagaatctta | a | | | | | 431 |
| <210> <211> <212> <213> | 5570 399 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ll n locat: | ions | | | |
| ttcgattcat | tctatgcacc | catggtggtc | cacattgtgt | ttcgtgcact | tttattctcg | 60 |
| ttntgtttac | tttttatacg | ccctattgac | gtgcttaagc | cattntactt | aagtcatttc | 120 |
| tcgcttaact | taaaaataaa | atcaatttcc | accaaacgtt | tgaattgtat | tatccgttaa | 180 |
| cttcggttaa | aatgaattcc | gaccgttcgg | tcgtgctgta | accacgttgg | aaatcaaaaa | 240 |

| gaggtaaaaa | ataatatagt | aatcaaaaaa | catcttttag | taaaataaag | cggaaaatca | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atcggacgtt | ttttctcttt | gggatttctc | attcttaatc | gaattgatta | ataactaaag | 360 |
| tgaaactaag | gctaaaatca | actcgcctag | tcaagctcg | | | 399 |
| <210> <211> <212> <213> | 5571 181 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tcctagttga | tgcagacgct | atacgccaca | tcatgcgatg | tcgcgaaccg | tttgaagacg | 60 |
| ccacgagtgc | gagtatggtc | atatgaggaa | cccgactgat | tggtcgatga | aaggccatcg | 120 |
| ccattnctat | gttaccgagc | aggatttgca | cgactgtgcc | gaaactggtc | ggacatcccc | 180 |
| t · | | | | | | 181 |
| | | | | | | |
| <210> <211> | 5572 449 | | | | | |
| <212> <213> | DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5572 | all n locat | ions | | | |
| ttctatgtac | ccgtggtggt | ccacattgtg | gtttcgtgta | ttttattctt | ggttcattta | 60 |
| ctttntatac | ccccttttga | cgtgcttaag | ccattttatt | taagtcattt | ctcgcttaac | 120 |
| ctaaaaataa | aataaatttc | caccgaacgt | ttgaattgta | ttatccgtta | acttcggtta | 180 |
| aaatgaattc | cgaccgttcg | gtcgtactgt | aaccacgttg | gaaataaaaa | aagaggtaaa | 240 |
| ataatattat | aataatcaaa | aaatatcttt | gagcaaaata | aagcggaaaa | tcaatcggac | 300 |
| gttntctctt | tgggatttct | cattcttaat | cgaattgact | aataactaaa | gtgaaactaa | 360 |
| ggctaanatc | aactcgccta | gtcaagctcg | tncacaaata | taggtttttg | aagttgtcat | 420 |
| ttcatttctt | actaagtaaa | tggatcatc | | | | 449 |
| <210> <211> <212> <213> | 5573 405 DNA | × | | | | |

| <223> <400> | unsure at all n locations 5573 | |
|-------------------------|--|-----|
| agctgttata | aacagtttaa acttttggta atcgattaca taccttgtgt aatcgattac | 60 |
| aggctgttaa | attcaaattc aaaatttgca aattatttca taaatcaatt tagccattgg | 120 |
| taatcgatta | ccagagagga aatatcatat ttttgaaaat ataattgttc ttaaaaaaaa | 180 |
| cttgtaaaat | atttccttta gccaaacctg tgcagtatta attaaggaat tctttctaag | 240 |
| atcctaacta | agtacatcgt tcttcttgca tttctgaatt cttgacttga | 300 |
| tctttggcat | cattaaaact tcatatcata tatgcttcta caatactccn nctttttatg | 360 |
| atgacaataa | tatgaaatca agataaacga tatagcattg ataat | 405 |
| <210> <211> <212> <213> | 5574 351 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5574 | |
| atcatctaat | aacctcgtaa ttttcttttg tatagattat aactaacaga gacgatttct | 60 |
| tgaattggta | cctaagagta aaatttagcg attaaatagt tacagtctct aaatcgctag | 120 |
| catatatatt | ttttgttttg ttttttgttt atcatgattg ttgcatatga ttgttcttaa | 180 |
| ttggacctaa | attgacgtac aaagaattgg gcaccctcca aagtttgtga caatgatgca | 240 |
| cagttattgg | tccaaatgtg aaccggcccg cattgaagtt attgtgcatt attattatga | 300 |
| atagaanaag | g aaaggettae attggtteag ttetetatta taaatgggaa a | 351 |
| <210> <211> <212> <213> | 5575 288 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5575 | |
| tattctctat | ctaccaagct acttctgttc ctaaacaaat taacatattt gttgaagagt | 60 |
| gattacgcac | c agataaggct atcatcttat agatggatat ctaacttgag cacattattt | 120 |
| tttaactctc | c aagatataca aggagttttg agagtttttt tttttttta caaactntga | 180 |
| atgtatagaa | a taaagcttag agagaataag aaattcaaaa ataatttgtt ctttgtaaat | 240 |

| cttctagtat | ttataaactt c | ctttaacaag | tagtcgttat | ctctaaac | | 288 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5576 388 DNA Glycine max | | | | | |
| <223> <400> | unsure at al 5576 | ll n locati | ons | | | |
| ctttaacaag | ctctgaacaa t | tatacttggc | cttcatttaa | ctgtctctgg | gcttggcggc | 60 |
| cacgctcaac | aaagtacttt (| cgacacctac | tgtacgttga | tttgaccaag | gctgttatgg | 120 |
| gaatgttgcg | acaatccttc a | aaaaccttat | tgatacattc | tgagaggctg | gttgtcatgt | 180 |
| ggccatatcg | acgtccttct t | ttatcataag | ccatcagaca | ttttttttt | gaaatgcgat | 240 |
| caatccatgt | tgctatggct g | ggacttagtt | cacgaaattn | ttctaaatct | tgatcaaaaa | 300 |
| tatgcttgca | aggagtggag g | gctgcatana | attacttatc | aataacaact | ttaagatata | 360 |
| tggaagtaaa | taaactgacc a | ataaatat | | | | 388 |
| <210> <211> <212> <213> | 5577 383 DNA Glycine max | | | | · | |
| <223> <400> | unsure at a 5577 | ll n locat: | ions | | | |
| ctagttccgc | tccggagtac | gacagtcacc | gctntatgag | cgctgtacac | cagcagcgct | 60 |
| tcgaagccat | caagggatgg | tcgtttctcc | gggagcgacg | cgtccagctc | agggacgacg | 120 |
| agtatactga | ttttcaggag | gaaatatggc | gccggcggtg | ggcaccactg | gttactccta | 180 |
| tggccaagtt | tgatccagaa | atagtccttg | aattttatgc | caatgcttgg | ccaacagagg | 240 |
| agggcgtgcg | tgacatgaga | tcctgngtta | ggggtcagtg | gatecegtte | gatgccgacg | 300 |
| ctatcagcca | gctcctggga | tatccgatgg | tgttggaaga | gggccaggaa | tgcgagtatg | 360 |
| gccagaggag | gaaccggtct | gat | | | | 383 |
| <210> <211> <212> <213> | 5578 405 DNA Glycine max | • | | | | |

| <223> <400> | unsure at a 5578 | ıll n locati | .ons | | | |
|-------------------------------|----------------------------------|------------------|--------------|------------|------------|-----|
| gtgtaatcga | ttacactgct | ntgataatcg | attaccagtg | attgtttctg | aataaatcaa | 60 |
| aagatgtaac | tcttcanaag | gtttttgact | ntntcaaatt | ggttttaagt | tcttctaaaa | 120 |
| gttataactc | ttctaaatgg | tcctcttggt | cagacatgaa | gagtctataa | aagcaaggct | 180 |
| ttgatttgct | tttcaatata | cttttccaat | caatcttata | caatccttta | caagccttga | 240 |
| atctcttgga | acttcttctt | cttctttgtg | ccaaaagctt | tccaaagttt | tctggttttt | 300 |
| taaaccttga | aaacttgtgc | tattcatcct | tatcattntc | ttctcccttt | gccgaacaga | 360 |
| attcatcaag | gactaaccgc | ctgaattctt | tttgtgtctc | tcttc | | 405 |
| <210> <211> <212> <213> <223> | | x all n locat | ions | | | |
| <400> | 5579 | | | tattattatt | agattattag | 60 |
| | | | | tcttattgtt | | 120 |
| | | | | tatgctctta | | |
| | | | | | tgtgaatatg | 180 |
| acaccctcta | tctcacacat | atatgtacta | ataataaaag | gaataaaaat | gtgaaattaa | 240 |
| ttaatagttt | ttaaatcaca | tttaaataaa | agtctttcaa | aagaataaaa | ggctcacatt | 300 |
| cactctttta | acatcataat | agaacttgtt | caaataaata | ataaatcatc | tcggctcana | 360 |
| gcaaggtncg | ccaagacttc | atgcaattta | tatagaaact | tatactccaa | tgtcacatnc | 420 |
| tatc | | | | | | 424 |
| <210> <211> <212> <213> | 5580 217 DNA Glycine ma | × | | | | |
| | | ı teceggaaga | ı tttaagccaa | gcccctactt | ttgaggggca | 60 |
| | | | | | cccatcttgt | 120 |

| gccgctgctc | caccacaaag atco | catcccc | gcatgaacta | ccccagtcaa | acatagtccg | 180 |
|-------------------------|-----------------------------------|----------|------------|--------------|------------|-----|
| ccatataccg | gcctcaccca cacc | ccgtaaa | agaatct | | | 217 |
| <210> <211> <212> <213> | 5581 383 DNA Glycine max | | | | | |
| <223> <400> | unsure at all 1 5581 | n locati | ons | | | |
| tctttggacc | ttgaacaggc aac | taactcc | tctntcagaa | ccatgctatg | tgctcgcgac | 60 |
| tgagcccttt | cttcctttcg caa | cttgagt | tcactattgc | taccccatag | agctccgcga | 120 |
| aatttgttcc | ggccatactc tgt | cttgcga | gccctcttgg | tctcttgttc | aagggctctt | 180 |
| gcggtaattg | cattctcttc ccg | taacccg | gcacactcct | tccgaacgtg | tgtagcggcc | 240 |
| aacttgaact | tctccttggc aag | ttttgcc | tttcctaact | cgcttntgag | agctaggact | 300 |
| tcttcgtcct | cttccggtgc ttc | anaactc | tctttgctga | cgacttttaa | cttggcgagc | 360 |
| caatctaaac | ctcgtatatg aac | | | | | 383 |
| <210> <211> <212> <213> | 5582 183 DNA Glycine max | | | | | |
| <400> | 5582 | | | | | |
| ctagtttagg | ggcccccct ctc | tccctcg: | cgggagactc | tctctctctc | tcctctctct | 60 |
| cttctattct | tcgttattag ttt | tagtctc | tcttctcttt | ctctgttatt | tctgcttttt | 120 |
| ttgaattcca | gttcagactt tta | ıgttttat | caataaaatt | tcattctcta | tttgattaat | 180 |
| gga | | | | | | 183 |
| <210> <211> <212> <213> | 5583 342 DNA Glycine max | | | · | | |
| <223> <400> | unsure at all 5583 | n locat | ions | | | |
| ttggagaggt | taatgaaaca acg | gagatgat | gcgctccatg | g agaggttgga | tcanatggag | 60 |

| | | atannanaa | tccattattc | aatttcgagc | gtctagatat | 120 |
|----------------------------------|-----------------------------------|--------------|--------------------|--------------|--------------|-----|
| | | | | aatttcgagc | | |
| ataatgcgcc | tcaatcggac | ctccgagtta | aaagttatga | ccatttgaaa | tgctcaagag | 180 |
| cttccattgt | tcaatttcga | gcgtcacgat | atattatgca | cctgaatcgg | acctgcgagt | 240 |
| gacaacttat | gaccatttga | attgctcaag | agcttgcatt | gttcaatttt | gagcgtcacg | 300 |
| atatattatg | cacctgaatc | ggacctgcga | gtgacaactt | at | | 342 |
| <210> <211> <212> <213> | 5584 432 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tctacatttc | cttagtgaca | agtcatctgc | ctagaagttt | cttgtcttga | cctggntgnt | 60 |
| gtgtctttct | catctgccat | gcacttccat | gtttaatttc | gagtgtctcg | gtatattatg | 120 |
| cgcctaaatt | ggacatccga | gtaaaaagtt | atggccattt | gagtttgcct | agaacttttg | 180 |
| tgttcaattn | tgagcatctt | gatatattat | tggcctgaat | cggatatcca | agtcaaaagt | 240 |
| aatggcccat | tgaattntcc | ttctgcttcc | atatataata | ttgagcgtct | cgatatgcta | 300 |
| tgcacccgaa | tcggatattc | gagtgaaaag | ttatgaacca | tttgaattct | tgagaagctt | 360 |
| tcgtgttaat | ntttgagcgt | cttgaatatc | atgggcctca | atcatacacc | cgagtchaaa | 420 |
| gtatggtaat | tt | | | | | 432 |
| <210> <211> <212> <213> | 5585 397 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5585 | all n locat | ions | | | |
| gagacattta | acatanaact | agtcaatgta | ttétacactt | atgcacatgt | tgaccttgaa | 60 |
| cgtaacctct | tctatattgt | taatggagto | gatatggtcg | g cagatgtttc | catgtggaag | 120 |
| gaagttgctg | gtctagacat | aggtggagto | cataagttt <u>c</u> | ı atgaaactac | agatggttac | 180 |
| aacaagatgo | agacatatag | g gggaatgctt | cttgatagtg | g ttcccagaag | g tgatcaaaaa | 240 |
| cactttaato | aattaaatca | a agaatctaat | tgattacact | attctttana | gctctctagg | 300 |

| tattgggaag | aacactntaa tcgattacct c | ctccttgact (| ctgntttcat | atgttnttac | 360 |
|-------------------------|-----------------------------------|--------------|------------|------------|------|
| atattggtgt | agcatatgta tgagtttcta a | agatgc | | | 397 |
| <211> <212> | 5586 367 DNA Glycine max | | | | |
| | unsure at all n location | ons | | | |
| gtcttcanaa | cattgttcag ttctatagaa (| tttgtgttat | tataactctc | gggtccctat | 60 |
| gaaatgctat | gaagattaag ttagctacaa | ttggggattc | gatatatttt | tacaagtttg | 1,20 |
| ggtagctgat | gatgtattgg aaactgaagc | tcataaactt | aataaagcag | ttgtgttcat | 180 |
| ataaagttnt | tgttattctt attagcctct | taatggaagc | atcccctata | atgaggtttg | 240 |
| gatgatgtan | gtctgagagc tcgtgtgtcg | atatattata | tnttttattc | ttattagcaa | 300 |
| cttttgagac | ttacatcttt aagttagctt | agagacaaac | atatacgttc | agtctctcta | 360 |
| tgtatgt | | | | | 367 |
| <210> <211> <212> <213> | 5587 348 DNA Glycine max | | | | |
| <223> <400> | unsure at all n locati 5587 | ons | | | |
| taaaagtact | ttttaattaa ctaatgatga | gaagactctt | acaccaataa | tactcgtttg | 60 |
| ttaaattctt | ttataaacta tataaacttt | ccttttccgc | ttaccatgca | ttacagctgt | 120 |
| atatatgttc | ctttgaaaag aaaaaacatg | aaactcatcc | atcagacago | ttcaaattcg | 180 |
| taaaacttca | cgaaaaatct gtcaattntc | acttttaatt | atcgctcgga | atgtgtgagt | 240 |
| ggçttgctat | tatatatctg attaattcga | ctcgaatgaa | ctgtttaaaa | ggataaattt | 300 |
| ctcactgtat | tattcattta tttgttcatg | aaactttcca | tatctagc | | 348 |
| <210> <211> <212> <213> | 5588 360 DNA Glycine max | | | | |

| <223>. <400> | unsure at all n locations 5588 | |
|-------------------------|--|-----|
| cgcatacttt | gnggataaat tgctgatgtc aatgggctcc ataacccata atcatctgta | 60 |
| caaatgaaaa | tattcaaata gagactcttt ttgtcctttt ctaactatgt acaactcttt | 120 |
| ttggaaatcc | attattattg agttatgctt gtgattatta caagtatata gtacaatgca | 180 |
| aacttcaact | tatcatatat agagaagaag aaataagaga ctcacacgac gactggtgga | 240 |
| tatatagtcc | agcacttacc atccagacat gagatcattt gctcgtgggc ncatatttat | 300 |
| ctaatttgta | tttgaatatg cctcanacca attagacact atgggtatgc ctatcactcc | 360 |
| <210> <211> <212> <213> | 5589 436 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5589 | |
| tactcttcat | gtaacctatg taaactacat ggatattgat taacattgnt aatatctcta | 60 |
| tatgtgcttt | aaccggaatg atatcgatat ctacattaag tagaatattg tgcatctata | 120 |
| cacanacata | caataaatat gaaatattat ttcgttcgat aataaacatt atttgttatt | 180 |
| gctttagtct | tctggcacga tatatatagg ggcccgtctt gtaaatttta ttcaagtatg | 240 |
| tgtgcaactg | acatattctg ctatagactt tttgattgat gcatgcactg acaccaatta | 300 |
| tgaaagaagg | gttctgaata ttgtcccaat taatcacatt ctntgaaaat gaaatgcttg | 360 |
| tcataacttg | tattctatat atgttatgat attaacattt ccaatatctg atttctggtt | 420 |
| ggtaaaagta | gtatat | 436 |
| <210> <211> <212> <213> | 5590 299 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5590 | |
| acttacccgt | gaagactgaa gaaaacgatg aacgaacgat ggatcttgaa gaacgggtga | 60 |
| gaatcttcgc | gtaattactc acggaaacgt tacggaagcg cctcggcttg gattttcttc | 120 |

| acggaaataa | ttttcctcag (| caaattcgaa | agagagataa | gtgcctaagg | ggttgaaccc | 180 |
|----------------------------------|-----------------------------------|-------------|--------------|--------------|--------------|-----|
| ttttcttctt | cacttctccc (| cctatttata | gcanaatagg | ggagaagctt | gccgcccagc | 240 |
| tcgcccaggc | gagcaaggtt (| getteeteca | gaagcaacag | ccttctggag | gaatcttct | 299 |
| <210> <211> <212> <213> | 5591 266 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5591 | ll n locat: | ions | | | |
| ctcagcttct | ggtgctgact | agatctattt | agctagtcct | tggtctaana | tatgaagata | 60 |
| tcctattcta | caccggagac | ctacatatac | taagagggga | aggagctgca | tcaacttctt | 120 |
| gggattctgg | cagatcttgg | agctttaatc | tcgctgagtt | cattaaagat | tgtggcggat | 180 |
| ttatctacac | gtttgtgtca | tccacaacta | tctctttagc | atcttttctt | tattttacat | 240 |
| cattcctttt | aactatatta | ttgata | | | | 266 |
| <210> <211> <212> <213> | 5592 345 DNA Glycine max | ς | | | | |
| <400> | 5592 | | | | | 60 |
| | | | | | aaacttaata | |
| | | | | | aggtttggct | 120 |
| | | | | | tttttaaaaa | 180 |
| | | | | | a aactaaagat | 240 |
| gaacatgcaa | caatggaaag | taaatgagaa | a acaatgaaga | a aggatacaat | acacaaagaa | 300 |
| attcacattg | gttcaaccta | accaggggcg | g tgtataccta | a cacct | | 345 |
| <210> <211> <212> <213> | 5593 394 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5593 | all n locat | tions | | | |

| ntctataagt | cctanatgac | atttcaagct | agggttaact | cactntaacc | tccaactctc | 60 |
|----------------------------------|-----------------------------------|--------------|------------|--------------|------------|-----|
| anaacctcac | tctntttcca | ctcataacac | catattctca | ctntctaacc | ctaggttaac | 120 |
| tctacccttc | atctctaaca | gttttccata | agcaatttca | gcacataaac | atcacaagca | 180 |
| tcatcataaa | aaccctaaaa | ctgaatgggt | aagcttaact | catccaaaca | tggcaagttc | 240 |
| aacatccttt | caacaaattt | cttcacaaat | aactatcatg | aagcagaaac | ctagcaaaac | 300 |
| tacccatcat | atctcccaga | acccaatacc | cacgaaaatc | aagtgagaaa | gaagtctacc | 360 |
| canacctgaa | atttaagggt | ccacacgtag | agat | • | | 394 |
| <210> <211> <212> <213> | 5594 359 DNA Glycine ma: | | | | | |
| <223> <400> | unsure at 6 | all n locati | ions | | | |
| tggtaatcga | ttaccagtgt | gtttgaacgt | tgaaattcaa | attcaaatgt | gaagagtcac | 60 |
| atcctttcac | gaaaatgctt | tgtgtaatcg | attacactga | tttggtaatc | gattaccagt | 120 |
| gatagtttct | gagcaaatca | aaagatgtaa | ctcttcaaat | agtttttgac | tttttcaaat | 180 |
| tggtttaagt | tnttctaaag | gtcataactc | ttctaatggt | tctcttgacc | agacatgaag | 240 |
| agtctataaa | agcaagactn | tgttntgcat | tntaanaaca | tctttccaat | tcattcttta | 300 |
| gacaacaaac | ttttgccaat | tgctttctga | gtctctttga | acttcttctt | tctcttcct | 359 |
| <210> <211> <212> <213> | 5595 301 DNA Glycine ma | | | | | |
| <223> <400> | unsure at 5595 | all n locat | ions | | | |
| tgatgatatc | ttagatgatg | acananagct | cacaagtcaa | gagcacttca | tgatacaaca | 60 |
| gatgatgatc | tctcgaatca | aaaaatgagt | tcgagattga | atcacgaaca | cttcaaggtt | 120 |
| ccgatggaac | attgatttct | agaatcaaga | attaagtttc | : acgattcaag | ttccaagaat | 180 |
| caatatccag | attcaagaat | caagagaaga | cttcatcaag | , ataagtatta | aaaagtcttt | 240 |
| tcaaacactg | agtagcacat | gaatttttct | cagaaccttt | : taccaagact | ttctagtctc | 300 |

| | | 201 |
|------------------|--|-----|
| t | | 301 |
| | | |
| | • | |
| <210> | 5596 | |
| <211> | 322 | |
| | DNA | |
| <212> | | |
| <213> | Glycine max | |
| | and the second second | |
| <223> | unsure at all n locations | |
| <400> | 5596 | |
| | | 60 |
| ctactctact | ctcacttctt ttatatatat cataacatat gcatacacaa aagattgaag | 60 |
| 0090000 | | |
| gaagtgatat | ttacaacaca naatgatcaa catcatgata cttctataga tatctaacta | 120 |
| Caagicacai | Concurred in the second | |
| | ttacttctca gctctgggtg atttgatgaa caccagaatc cagatccccc | 180 |
| tgtcagtgta | ttacttctca getetgggtg accegatigua caccagano ing | |
| | the state of the s | 240 |
| tccttctgcc | agtaatgcaa gattcaggtt aaagcatgtt ttttttctca ttaatatttc | 240 |
| | | 200 |
| ttcacgaatc | catcctaatt gaggtaacag agaaccaatg gccatagcat gcctgcacag | 300 |
| cccacgaac | | |
| | tastatasta ta | 322 |
| aagactcttc | tgctatccta tg | |
| | | |
| | | |
| <210> | 5597 | |
| <211> | 389 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <213 <i>></i> | Glycine man | |
| 000 | unsure at all n locations | |
| <223> | | |
| <400> | 5597 | |
| | | 60 |
| gtggtattat | agcacaagag cttcaagtat gtgctcctta aacctccata tatattttgc | 60 |
| | | |
| tatacettet | cttctatagn tgcttcttca ttcttctcca tgtatctcct cacatgtctt | 120 |
| cycaccccc | | |
| | g tttntaacat gattatttag agtttccact gattaaattt gctatacaag | 180 |
| gtgataaatg | fillicadeac garracted agreecedes garrants 5 | |
| | talent talent talent talent | 240 |
| ctagatttga | a ttttctatgg ttcaaatttc ttggtcttgt tcttgaacca tgaattttgt | 240 |
| | | 201 |
| tgagtttaag | g ttcctttgag ttntgtcttg atattttttg tggctgacac cgaaaccata | 300 |
| 0949000 | | |
| | c aaacatatta aagtataaga aaacctcaca catctagagt gacttgntca | 360 |
| adallicitat | , adacatated augenousys states and the same | |
| | and the second s | 389 |
| cctattgtag | g ttntgtcata caagtcatg | |
| | `. | |
| | | |
| <210> | 5598 | |
| <211> | 289 | |
| | | |
| <212> | DNA Clumina may | |
| <213> | Glycine max | |
| | | |
| <223> | unsure at all n locations | |
| <100> | 5598 | |

| tctcgaatat | tatgcacctc gaatggactt ccc | gtgtgact a | agttatgacc | attntaattn | 60. |
|----------------|---------------------------|------------|------------|------------|-----|
| ttcgagagca | ttcggtgttc aatttcgagc gtc | ctcgatat a | attatccatc | tgaatcggac | 120 |
| ttccgtgtga | taagttatga ccatttgaat tto | ctcgagag (| cttccgttgt | tcaatttcaa | 180 |
| gcttctcgat | atattatgca cctgaatcag act | ttccgtgt (| gaaaagttat | gaccatttga | 240 |
| atttctcgac | agattccgct gttcaatttc gag | gcgtctcg (| gtatattat | | 289 |
| | | | | | |
| <210> | 5599 | | | | |
| <211> | 253 | | | | |
| <212> | DNA | | | | |
| | Glycine max | | | | |
| <223> | unsure at all n location | ıs | | | |
| <400> | 5599 | | | | |
| cactgcttcc | atgcccaccc ctgaggcgtg cg | tctncatg | gtaaatagga | gggagaaatc | 60 |
| • | | | | | 120 |
| taactacata | ttaacacgag ctgacggtag ag | cctccttt | agggtcttaa | atgettggte | 120 |
| agcctccaaa | gtgcattcgt aaggatccct ac | tggtgagc | ttgaccaagg | nggcaacaat | 180 |
| at at agagg | atacccttga ataaaccgac gg | rtaaaaatc | ggcgagaccc | atataacttc | 240 |
| acacayayye | acaccetga acaaccegar 33 | , | | | 253 |
| atatagatct | cgt | | | | 233 |
| | | | | | |
| <210> | 5600 | | | | |
| <211> | 295 | | | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |
| -2225 | unsure at all n location | ns | | | |
| <223> <400> | 5600 | | | | |
| | | | | | |
| agagtactta | gtgagagtga ttctcctaaa tt | tcttgagtg | attcaagaac | accctggctg | 60 |
| tatcaaagga | ctgtcacaac ctttgtgtgt tg | gccctcgct | ggaaagagtg | attctttcct | 120 |
| | | | | | 180 |
| tcctatcatc | tccacccttg gtctttcgaa co | cacaattcc | agathatyca | CCCCigccca | |
| aaattatcto | gtgaccataa ctnccatttc ac | cacactcaa | attaagtgat | tcttgagcct | 240 |
| aaattgaatn | tcataacgag acacttcacc to | cgntgtgga | atcacctcat | ttgga | 295 |
| - | | | | | |
| <210> | 5601 | | | | |
| <211> | 368 | | | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |

| <223> <400> | unsure at a | all n locat: | ions | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ctcagcttac | aatcaggaag | cgttgatggt | gtcatcgacc | ctccattcct | agtcagacgc | 60 |
| cacgtgaagt | ggaagatggc | ccgcacgaag | aanacagggg | aaatgacgac | tgaggccgca | 120 |
| aaggaaatcg | ctgagaagat | tgtaagtcat | tntcaactaa | ccattacaat | tatatttcaa | 180 |
| tattttgtga | atgccatgta | ccactgtgtg | ttttctgtgt | aggattcttt | tgaggagcag | 240 |
| gccacacagg | gatccttcgt | ccctcatcga | cgtcaggatg | ttctcgccgc | tgctattgga | 300 |
| cgtccagagc | accctagatg | tgtccatgct | gctggatccn | gtgtcaccat | caatcaatac | 360 |
| tttggatc | | | | | | 368 |
| <210> <211> <212> <213> | 5602 131 DNA Glycine max | ĸ | | | | |
| agttagagct | ttagtagtaa | gaatatctgc | ttattagtct | ggagatggat | catggtacac | 60 |
| taacatgctt | ctatttagta | cctttctgca | cataaaaagt | ggcccaatat | gtatgctgtg | 120 |
| tcctggagtg | a | | | | | 131 |
| <210> <211> <212> <213> | 5603 374 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5603 | all n locati | ions | | | |
| tgcgggtctg | ggagacgaaa | gtcaagtgtt | cgctatatgt | gaagatgatg | ttccaagtac | 60 |
| ttcggatttg | gtccgaccat | gccctcctga | tttccagctg | ggaaattggc | gagtggagga | 120 |
| acgccccgac | atttacgcaa | caagcataat. | gtaaaccttt | acggttntaa | aagctctata | 180 |
| gttgggccta | ggctttagag | ttctcattnt | gttaaggctc | tgtgtctttt | gtttttgaat | 240 |
| ttataataca | aggatctttc | ttcatctgtt | cctggtctct | acccattctc | attcatttgc | 300 |
| atgtttactt | ctttttctga | aacggcagat | tcgatgacga | gtcccccgaa | gtactaatac | 360 |
| ctangaccca | tota | | | | | 37/ |

| <211> 4 <212> D | 604 14 NA lycine max | · | | |
|--------------------------------|--|-------------------|----------------|--|
| | nsure at all n locations | | | |
| nttcgtanag c | atageggaa gatetgggae etag | tcatgg tagatgtctc | caccgaggcc 60 | |
| attgcctccc t | cgcccaata ttatgactag ccgt | tcaggt gcttcacctt | tggggacttc 120 | |
| tagttatcac c | cacggtgga agagtttgaa gaaa | tcctat gatgccctct | atggggaagg 180 | |
| aaaccatacc t | tttctcggg attctatccc tctt | tagcta gaatttcaga | gatagtccaa 240 | |
| atctcggtgc a | agaattaca ccacagaaag caag | tcataa atggcgtggt | tggaatacca 300 | |
| tcgaaatgtt t | ggaagcgaa agcaagagtc tcgg | caggta acgacgaatg | ggaacagttc 360 | |
| attgacatac t | ctcactgtt gatctttgga gggt | cctctt tccaatatga | tggg 414 | |
| <211> 2 <212> D | 605 92 NA lycine max | | | |
| | nsure at all n locations 605 | | | |
| aacttcgcca a | aaatccgca ttgagaaacc ttta | ttcaaa cctttcacag | ttagtgagaa 60 | |
| ggctaataga a | aaattatgg aacttagaac aact | aaatcc ttaattgaag | gcgtaggtga 120 | |
| caaccatagt g | aattactaa acaagattgg tagt | ttactt aaagtcattc | cagatacccc 180 | |
| ccaagcctcg g | aaaatactt ncaaaatggt gaca | agaagt acctgcaaat | taatcaatgc 240 | |
| tattaatgaa g | atagtgacc aaaactcata taac | acaact gagataggat | ca 292 | |
| <211> 3 <212> Di <213> G | 606 10 NA lycine max nsure at all n locations 606 | | | |
| | atcaacaac agtcccagaa ttct | gacaag ctgccttctc | aagctgtcca 60 | |

| aaaccccaaa | aatgtcagtg | ccatttcatt | gaggtcggga | aagcagtgtc | aaggacctca | 120 |
|-------------------------------------|--|--------------|------------|------------|------------|-----|
| acccgtagca | ccttcctcat | ctgcaaatga | acctgccaaa | cttcactcta | ttccagaaaa | 180 |
| aggtgatgac | aaanatctac | ctaacaattt | ctgtgcaggt | gaatcttctt | ccacaggtaa | 240 |
| ttctgatttg | cagaagcagc | acattccccc | tcttccattc | cctccaagag | cagtttccaa | 300 |
| cnaaaaaatg | | | | | | 310 |
| <210> <211> <212> <213> <223> <400> | 5607 426 DNA Glycine max unsure at a | | ions | | | |
| | aagcactact | acatcatatq | tgtatgacat | cacttatoga | atgcatacta | 60 |
| | agaactcatg | | | | | 120 |
| | tcaaatcaat | | | | | 180 |
| | | | | | | 240 |
| | aagtgacacg | | | | | |
| ataaccgatg | ttgaaagttt | cgcttactac | attgattnta | gcaaaaacca | atgcaaaatg | 300 |
| tattttttt | aataaaaaag | ttagcatttt | gatatgtatt | cattgggtcc | atgtntatan | 360 |
| ttgngaatat | gcatcttata | tattaataca | ctattaccta | tatgctatca | agttaatttt | 420 |
| ttttta | | | | | | 426 |
| <210><211><211><212><213> | 5608 347 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a 5608 | all n locati | ions | | | |
| gtcttggatt | cttctagtaa | gttatcttat | ccacttctca | gataaaattt | cttctttatt | 60 |
| attaaagagg | agaaaagaga | gaaattcttg | aatggtcttg | acttatataa | gattattgta | 120 |
| gaacgaaaga | acttggtctc | tataacaatt | atcccaaaat | aagataaaat | tatcttttaa | 180 |
| gacaagtgta | tttacctttt | caaatcaact | aagttctttc | tatgataatt | agccttacaa | 240 |
| aanaatgtga | aagacattat | tgtctaataa | ttcatattag | actctatacc | gacttctcta | 300 |

| acagtaaaaa | atgaatattg | ttaattaaac | tattgtgata | accatct | | 347 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5609 208 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5609 | all n locat | ions | | | |
| tatgttgatg | cctactattg | atatatagca | ttgaccatac | atgatactag | ctagagagaa | 60 |
| tagaaactat | cgataatagt | acactccata | ggtagtaaac | cacancaaac | tctagtggct | 120 |
| tgcataactt | tagataaatt | tagcggctct | taatgcttat | cctatatata | ttataatgac | 180 |
| ataagtattt | ctaacttggt | acctccta | | | | 208 |
| <210> <211> <212> <213> | 5610 302 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5610 | all n locat: | ions | | | |
| atatgcatgc | aatctacgga | ggggagcggt | gttgcgaagc | ccanaccctt | ggtgatatac | 60 |
| ttcactaaaa | gcgcagcttc | gcaaaagcct | ggacacccct | ttgtagccaa | acctgttcct | 120 |
| ttcctgtacc | aaaatagcca | cgcggtcccg | tggagatatg | cacctccaag | ggagaaggaa | 180 |
| gaagaagtca | ctgacgtcag | ctcgctgtca | gctaaagtaa | caaatatcac | gggactgagt | 240 |
| ggtgtgaccc | gtagtggtcg | tgtgttcgca | cctccggacc | taccagtcca | acccgcggac | 300 |
| gt | | | | | | 302 |
| <210><211><212><213> | 5611 265 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locati | ons. | | | |
| ttattccatt | tattactttg | atacatacgt | tcatagattt | gtcattcaga | ataataaaga | 60 |
| aatatatagc | tctctaactt | atactgttgt | ttgtcattat | atatacatga | tcctttcttt | 120 |
| ctttgttagc | ttctcagaat | ttccgcatgc | tttgtgaatc | ttctttgntt | atatctacgg | 180 |

| acaggtgttt | caatttgtga | catgtatagt | tatggaaaac | attatgtgat | catgaagctg | 240 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aacaaggttc | aagcatactg | tatat | | | | 265 |
| <210> <211> <212> <213> | 5612 387 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tacctattac | tgccttagtc | aatgaaacat | ttaataaaat | aaatgattaa | ttngttacta | 60 |
| atggcatgaa | aatcatgaat | atgataaagg | taggacatat | gtactttgaa | gacgtatatg | 120 |
| ccatgatgca | agagaatcaa | cacattgcta | cctgatatta | tgttcgcatg | tatgttcgag | 180 |
| aaacatgaga | gtntgaggtt | caagaaattg | taaatatgcg | gcttggttga | cgagcaatgt | 240 |
| catgcattgt | cnacatgaat | gaatggtcgt | gtgattatgg | agaatatcac | acacttcana | 300 |
| ttccttgctc | gcatgtgatt | gcaacgtgtg | ctntttgcaa | ttcagattat | gatgactctg | 360 |
| tcgatcctat | atacaagttg | gaaaaca | | | | 387 |
| <210> <211> <212> <213> | 5613 345 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| ctcacatgca | tccatcattt | ctgctggaga | tagttggctg | aatcaactga | acaaatgatt | 60 |
| ntttttgttg | tgactagcag | atgcttgttg | aaagtatgat | ccaatgcaca | aactactaga | 120 |
| cttattggat | tctctccttg | cctcctagct | ttcagatctg | aaatatcaca | aatcacacta | 180 |
| gaatgagggt | tgaacagtgt | taataaaata | caataactnt | tttgtaaatg | aataatttat | 240 |
| gacaagttca | naaagatata | tgcattggag | ttgtccactg | ataaggaaaa | acaagtttga | 300 |
| cgaaaataga | ggtcgatcat | tcagtacatg | tanagcaata | atttc | | 345 |
| <210><211><212><213> | 5614 307 DNA | | | | | |

| <223> <400> | unsure at 6 | all n locat | ions | | | |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| taaacaaaaa | tcaattgagg | gagcttcgcc | aagtgtcccc | atcgaaattg | agaaaccttt | 60 |
| attcagacct | ttcaaagtta | gtgagaaggc | taaacggaaa | attagggaac | ttagaaaaac | 120 |
| taaatcctta | actgaaggcg | taggtgacaa | tcatagtgaa | ttactaaaca | agattggtag | 180 |
| tttacttaag | gtcattccag | atactcccca | agcctcggaa | aatacttcta | aaatggtaac | 240 |
| aagaagtacc | tncaaattaa | ttaatgttat | taatgaagat | agtgaccaaa | actcagataa | 300 |
| cacaact | | | | | | 307 |
| <210> <211> <212> <213> <223> <400> | 5615 376 DNA Glycine max unsure at a | x all n locat: | ions : | | | |
| tctcacctct | tctcctttgt | cttccgntgc | atctccatgg | tggaaaatca | ccattgaaag | 60 |
| agctcatgga | agctcanaga | tccagcctcc | atagaagccc | cacaagcaag | cttccatcat | 120 |
| ctaatttcat | taaaacccta | aaaattaaaa | gctaaattct | atgggtttct | cccctaaggt | 180 |
| taaccaaagt | aaaagagtaa | agggaatgag | gaacttactt | ggattggtga | tggctgaaga | 240 |
| ttcgtanaag | atgcagaaag | aatgaatgca | naaatgcacg | aatttggtga | gagagaggat | 300 |
| gcacgcagtg | ttctaaaaat | ttcaggcaca | tgtgagtgta | actgatggta | cactcactta | 360 |
| agtaatttt | accctc | | | | | 376 |
| <210> <211> <212> <213> | 5616 429 DNA Glycine max 5616 | ζ | | | | |
| agcttgaaat | gaggaagtgt | agaagggtgg | ttcttcctgc | ttttattcgt | cgaccacaga | 60 |
| gtggtacctg | gagatatgtc | gcgggggtca | cgagactttg | gggacgtcag | gtggggtgct | 120 |
| attgcccaca | accaagcttg | atcaatcccg | acccaacccg | ggcatattca | gtcagtgaga | 180 |
| acctgtgatg | tacctaagca | ggcgagctct | tggcaatcaa | cagataaaag | gaacaaagac | 240 |

| cacaaagcaa | ggaggcttgt | gtggtggctg | gccagctgtg | aatcttgcgt | gatatatggg | 300 |
|---------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttatggcctc | tggtaatcaa | ttaccaaagg | tgggtaatcg | attactaggc | ttataaatga | 360 |
| agacaggacg | ctatgatggt | ctctggttat | cgattaccaa | ggggtgtaat | cgattaccag | 420 |
| gctttgaaa | | | | | | 429 |
| <210> <211> <212> <213> | 5617 450 DNA Glycine ma: | × | ÷ | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctntttgg | agtagaaaca | tgggaccaac | tcattttatt | tcaaaaagga | agtcgtatct | 60 |
| agtcaaggtc | ttagagacca | tacaagtttc | ctaacgattt | ctaattatgt | gggccattaa | 120 |
| gtctatcata | tgctgacaat | agccgagaag | cccatgaatc | tcttcggggg | cggagtaggt | 180 |
| gtctgccatc | gccttggcct | tggctaataa | tcggggaagt | tcttgactcc | cgttcaaggt | 240 |
| aagagcaaac | cgatccatcc | acatggttgc | ctcttggtgt | aaagagtcga | tcacccttcc | 300 |
| tctagcctct | ttttccgcgt | atacttgggc | atattcgtcc | gcaatcctat | gctcgtgggc | 360 |
| cgcggctaga | cctaactctt | cttggtactt | ggcgatgata | gctagcatgt | tggtctccgt | 420 |
| ctcgcataaa | cgctgagaca | agcttctttt | | | | 450 |
| <210><211><211><212><213> | 5618 428 DNA Glycine max | × | | | | |
| <400> | 5618 | | | | | |
| agcttaatga | attttatact | atatttatta | taaaaagaat | taaatagctg | aatatttta | 60 |
| caatgaccgt | gagcaattca | atgccaaagg | gcggcaaaat | ttggcaaata | ttcaaattta | 120 |
| agtttttagt | ttattaaaaa | cgcaataagt | atatgtgtta | ttttagtcac | aatttttaa | 180 |
| taaaattcca | aactttttga | taaaatagtt | aagtcctaat | ttttaagtga | tagaacgtta | 240 |
| agtttaggtc | ttaaaagaat | tttttaaaaa | atgaaccttt | aaaaaaaggt | taaattactc | 300 |
| atttggttcc | tatagtttca | taattcttac | ctttttggtt | cctataactt | gaaagtggtt | 360 |

| tttttagtcc | ctataattta | tattataatt | ctctcttact | ccctataatt | ctgaaagtgg | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atatttaa | | | | | | 428 |
| <210> <211> <212> <213> | 5619 448 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttgtgag | acanaaggac | ctatgatcat | ctgaatcttt | acactatcag | cttagataca | 60 |
| aatccatatt | aggtcccacc | acccaaaagt | gccatagaca | tgaaagcatt | tcaaagggac | 120 |
| aatgacaaag | aataacacag | taaaatcaaa | ttatttgtaa | cataaacctg | ngggagaatt | 180 |
| ggtttcacaa | atctttccca | gtttttatgt | ttatcaagta | cacatattga | taggctcatg | 240 |
| aaggccatga | cagaaaaata | aaggaaaata | agccaaagta | gttagagtag | atatagaagt | 300 |
| agttaggttt | ggtttaatat | tagttagtta | ctgaattagt | ttggtggcta | gcttaaatag | 360 |
| cagaagggaa | gtataagatc | actcattctg | cattgttact | tagtgtactt | accanaatcc | 420 |
| agagccagga | catgtcaagg | tagatgtg | | | | 448 |
| <210> <211> <212> <213> | 5620 408 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctntgagc | aaattcaaac | gacaataacc | tttntactcg | gaagtcggat | tgagtcccgt | 60 |
| tatatatcca | gacgctcgaa | attgaatgtt | gaagctctga | gcaaattcaa | acgacaataa | 120 |
| cctttttact | cagatgtcgg | atagagcccc | gtaatatatt | gagacgctcg | aaatggaata | 180 |
| ccgaagctct | gagcaaattc | aaacgacaat | aactttttac | tcggatgttc | gattgagtcc | 240 |
| cgtaatatat | cgaaacgctc | gaaattgaat | gttgaagctc | tgagcaaatt | caaacgacaa | 300 |
| taaattttta | ctcggatgtc | cgatggagtc | tcgcaatata | tcgagacgct | cgaaatggat | 360 |
| aaccaaagct | ctgagcaaat | tcaaacgaca | ataacttttt | actcggat | | 408 |
| <210> | 5621 | | | | | |

| | | • | | | |
|---------------------|----------------------|---------------|------------|------------|-----|
| <211> | 384 | | | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |
| | | | | | |
| <223> | unsure at all n loc | ations | | | |
| <400> | 5621 | | | | |
| | | | | | |
| agctntgagg | ataagaaatc tatattca | ta tatcctattc | ttgcttaagt | gaatgctcta | 60 |
| | | | | | |
| atgctagagt | ttaagaattc gactctct | tt ataatcctgc | caaactcatt | tgtttgcttt | 120 |
| | | | | | 400 |
| tagacacaaa | gtataagttc aacagaaa | tt aatctttgcc | cagtttgttc | ttcttgggat | 180 |
| ++++~++~+~ | | at tagastatat | | attananttt | 240 |
| ttttgttgtg | cgttcaagat tntagtct | et tageetetet | agigiatiac | gttaacattt | 240 |
| ataaaaatta | actttataac gtggatct | ca dosatatata | cttataggat | tagtgagata | 300 |
| acyyaaaccy | accitataac giggatet | ca ccaacacacy | Citatageac | cagicacaca | 300 |
| atatetotae | atggatataa taatgttg | aa totoactttc | atattgattg | ctattaactc | 360 |
| acaceegeae | acggacacaa caacgccg | ad egegdeeeee | acaccgaccg | ccaccaaccc | 500 |
| taaatgttcc | tataggtata acta | | | | 384 |
| . | 33 | | | | |
| | | | | | |
| <210> | 5622 | | | | |
| <211> | 430 | | | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |
| | | | | | |
| <400> | 5622 | | | | |
| | | | | | |
| tgcttaccac | ataaattgtt atattatg | at ttagcaatgt | cgaatagatg | aatgccacag | 60 |
| | | | | | |
| ggattgctaa | tatcaacacc tcaataat | aa tacccccagg | tgtatgactt | gcatatacat | 120 |
| | | | | | 400 |
| gtactcttaa | agcatgaaga ttgcatgt | ga atttagtett | tttattttat | cggcaaacgc | 180 |
| +-~=++++ <i>=</i> + | tataaaaaa attaaaa | | | | 240 |
| tagettttgt | tatccggcag attcaaac | oc acatgaatti | agicilaaal | aatcagtett | 240 |
| ggaatggtat | asatataggg gattgasa | -a gagagagttg | taggtaggtg | attaggattt | 300 |
| ggaattetat | aaatataggc gattgaaa | a gacagageeg | cagccagccg | CCCaccaccc | 300 |
| aatacatato | ttgatgactg agaaagac | aa tootacatoa | taatcataaa | acadadetea | 360 |
| aacacacacg | ergargarry agadagae | a eggeaeaega | egaccacaag | acagageeea | 300 |
| aacctatgag | ccatgatatg gctcgcac | ca agataactgg | tcagatgacg | totgatgcaa | 420 |
| aacccacgag | coargaracy groupear | ou uguoumoogg | Jouguegueg | cocgacgeaa | 120 |
| aaacgaaatt | | | | | 430 |
| _ | | | | | |
| * | | | | | |
| <210> | 5623 . | | | | |
| <211> | 438 | | • | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |
| | | | | | |
| <223> | unsure at all n loca | ations | | | |
| <400> | 5623 | | | | |
| | | | | | |

| | • | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| agctntgtga | gtgattctta | taaatcgatc | tctagctaca | atgaacgatt | gggctcctcc | 60 |
| tctcatagct | gcggctntgt | tttggctctt | gagcccggga | atgatctttc | agttgccggg | 120 |
| gaagaatgca | ccctttcagt | ttatgaacat | gaagaccact | gttgcatcca | tgtttgcgca | 180 |
| cactgttatt | tatggtctgt | ttctgatgtt | gttcttcgtt | ggtcttagta | tccatcttta | 240 |
| tatttaagca | gcagcaaagg | gtatttaaag | aaaacttatg | tgttgcttta | tcttttaaag | 300 |
| tagatcatgt | aacaaccttc | tcttgttgat | caatatgtat | gtgctctttt | cgaattt.cca | 360 |
| cttgatcagg | cttctactaa | tactttcacg | agtgatatgc | tcgtcgttca | ttatttaaaa | 420 |
| gtgacgtgaa | ttactatg | | | | | 438 |
| <210> <211> <212> <213> | 5624 440 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctttgagc | tttgagcacc | cacgactgtt | ccaagagcag | tctagggttt | tcttcgaccc | 60 |
| acagttccaa | cagtaatgta | gggttttctt | cgacttttct | tcgataggag | gttatgtggg | 120 |
| ttccaacgag | cggtttccga | cagtattgaa | atgaatgtgg | ggcaatgtgg | gtgtcgaccg | 180 |
| agtagttttc | ggcagatttc | gggtgggagg | agaaagagaa | gagagaatgc | aacagggťtt | 240 |
| tcgagcgcgc | gagttgtgaa | atttcatcac | gttttaacat | attaacataa | caacatcaac | 300 |
| atcggttttt | taaggataac | cgatgttagg | atgaatctgt | taacatcggn | tttgtaaaaa | 360 |
| ccgatgttaa | cttcaacaag | gtaacatcgg | ttttaaaat | accgatgtta | acatcaactc | 420 |
| cttaacatcg | gnntacccta | | | | | 440 |
| <210> <211> <212> <213> | 5625 434 DNA Glycine max | κ | | | | |
| <400> | 5625 | | | | | |
| agcttgtaaa | tcacttgcac | gggtccaacg | ctgtattgct | tcacccaaga | cccttcgtcc | 60 |
| caataatcct | tcatcaccca | cacgtcaaag | cgcttctctg | ttcccctcac | agggtaaaca | 120 |
| aggaacccaa | ttgaagcaga | ttcttcaaag | ggtaccaaag | ttccaaactt | ttcatctgaa | 180 |

| gaatcgcgaa | tttttggcac | ccttatcttc | ctaaacgatt | ctttgaccat | atcaaatgct | 240 |
|-------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| agaacaacat | cttgtgttgc | atcagactct | tcaacaaagc | cccaccagtg | gcaacaattg | 300 |
| tttgcgtaag | tgaaaacccg | agaagaaccc | cagatttcaa | ttggaagagg | gagaagagag | 360 |
| ggatcaagtt | ttctccaaga | gtttgaattg | aggctataca | actcagcact | ccaataccca | 420 |
| agttgtcttt | cate | | | | | 434 |
| <210> <211> <212> <213> <223> | | K all n locati | ions | | | |
| <400> | 5626 | | t . | | | |
| agcttatata | aatcgatacg | ctcgaaattt | tacatcgaaa | actctcgaca | aattcaaatg | 60 |
| gccatatctt | ttcacacgga | tgtctgattc | gggcgcataa | tatgtcgaga | ggctcgaaat | 120 |
| tgaacaatcg | aagctcttga | gaaattccaa | tggtcataag | ttctcacacg | gatgtccgat | 180 |
| tcaggcttat | aatatatcga | tacgcgcaaa | attaaacatc | ggaaactctc | gagaaattca | 240 |
| aatggccata | acttttcaca | cggatgtccg | attcgggcgc | ataatatgtc | gagaggctcg | 300 |
| taattgaaca | acggaagctc | ttgagaaatt | canatggtca | taacttttca | cacggatgtt | 360 |
| cgattaaggc | gcatcacata | | | | | 380 |
| <210> <211> <212> <213> | 5627 448 DNA Glycine mas | × | | | | |
| <400> | 5627 | | | | | |
| agcttggatt | tcctttgctc | cggaaacctc | ttctttctca | tttgaaccca | aacccaatct | 60 |
| ccgggttgga | aaacaacctt | tttgcgcccc | ttgtttgctt | gtctagcata | gctctcattt | 120 |
| ctcttttcaa | tttgggcctt | gactctttca | tggagctttt | tcccatagtc | cactttggct | 180 |
| tgtccttcct | tatgcttaaa | aactgaaata | ttaggcattg | gcaacaaatc | aagaagagtt | 240 |
| agtggattga | aaccataaac | aacctcaaaa | ggagaacaac | tagcggtgtc | atgcacaacc | 300 |
| ctattataag | aaaattcaat | atgaggtaag | caaacttccc | aatttttaag | attttttta | 360 |

| aatggtcctt | agcaaggtac | ccaaagtcct | attcacaacc | tctgtttgtc | catcccattg | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agggtgacaa | gcagtagaaa | atagtaac | | | | 448 |
| <210> <211> <212> <213> | 5628 446 DNA Glycine max | ζ | | | | |
| <400> | 5628 | | | | | |
| agcttcttga | cttgtcttgg | aaccagacca | caatctgtaa | ccccaggtac | ctgttcatgt | 60 |
| caagaggtat | taggaaaatg | atatctaaag | aatttagaaa | aaaacttagc | actcagaatc | 120 |
| aggctagcta | atacaacttc | aaaaatgtag | tataccagta | tcatctcaag | tccctttgtc | 180 |
| aaaccaacaa | gacgaggaag | tcgctgtgtt | cctaagacaa | tttaaaacca | ggttagcaat | 240 |
| actaaagaaa | aatataataa | tgacaattag | tcacaagaaa | tgcaccatta | ctcatggtct | 300 |
| aacttcattt | tacaaattat | tctaggccta | tctaacatgt | gaactaaggt | attaaaccaa | 360 |
| acttgtagtt | aattaataaa | ttcattataa | ttgaacttca | aacagctttc | aatgtaatgc | 420 |
| atgtcactca | acaatgagca | gtaaca | | | | 446 |
| <210> <211> <212> <213> | 5629 451 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttcatga | tgatgaacct | agcaattntg | atgatgtcaa | aagcccaagt | gatatattca | 60 |
| atacttcaag | atcaagcatc | aagaatccaa | tccaagattc | aagattcaag | ggaagaaatc | 120 |
| aagaagaaac | aagtcaagac | ttcatatgga | ataagtatta | aaagattttt | caaaaaccaa | 180 |
| atagcacagt | tttgttttac | aaaataattt | tctcaaattt | tctcaagtta | ccaaagtgat | 240 |
| tactctccgg | taatcgatta | ccagttggca | gtaatcgatt | acgagtaacc | agattgggtt | 300 |
| tcaaaatgtt | ttcacatgat | ttgtaacgcc | ccgaaatgat | nttcacatag | tgtaatcgat | 360 |
| tacactatat | tagttatcga | ttacaagtga | atctgaacgt | tggaatttac | aatcaattgt | 420 |
| gaagagtcat | aactcttcat | aaaatacatt | g | | | 451 |

| <210> <211> <212> <213> | 5630 369 DNA Glycine max | ς. | | | | |
|--|--|--|--|--|--|--|
| <400> | 5630 | | | | - | |
| cctgctgcat | gcaagctttg | agcaaataca | attacttaac | tttttactcg | gatgtctgag | 60 |
| tgagtgctgg | aatatatcca | aaagctcgac | attgaatgtc | taagctctga | gcaaattcaa | 120 |
| acgacaataa | ctttttactc | ggatgtctga | ttgagtcccg | taatacatcg | agacgctcga | 180 |
| aatggaatac | cgaagccctg | agcaaattca | aacgacaata | actttttact | cggatgtctg | 240 |
| attgaggccg | gtaatatatc | gaaaagctcg | aaattgaatg | tagaagctct | gagcaaattc | 300 |
| acacgaccat | aactatttac | tcggatgtct | gactgagtcc | cgaatatatc | ggaacgctcg | 360 |
| aattgaatg | | | | | | 369 |
| <210> <211> <212> <213> | 5631 432 DNA Glycine max | × | | | | |
| <400> | 5631 | | | | | |
| | | | | | | |
| agcttaatat | ttaatggtat | tttaagaaaa | agcccaagcc | aaacttcatt | aattttaaca | 60 |
| | | | | | | 60 120 |
| gaaacgcaaa | ttaatggtat | acaggcagaa | aatcataaga | catgcaaaaa | gttatcatta | |
| gaaacgcaaa | ttaatggtat cacaaagtaa | acaggcagaa | aatcataaga ctaacatgtg | catgcaaaaa taatgatgag | gttatcatta | 120 |
| gaaacgcaaa attttcagtt atacttgtaa | ttaatggtat cacaaagtaa gtttttagac tattgtttac | acaggcagaa tagctgttgt atgttgtaac | aatcataaga ctaacatgtg aaaagtattt | catgcaaaaa taatgatgag tgcagaatgt | gttatcatta | 120 |
| gaaacgcaaa attttcagtt atacttgtaa ttctctaaat | ttaatggtat cacaaagtaa gtttttagac tattgtttac | acaggcagaa tagctgttgt atgttgtaac ccctggtttt | aatcataaga ctaacatgtg aaaagtattt gtaccttcag | catgcaaaaa taatgatgag tgcagaatgt tttggacttt | gttatcatta acaatgttga cccaaaagat aagctgttgt | 120 180 240 |
| gaaacgcaaa attttcagtt atacttgtaa ttctctaaat agttgataat | ttaatggtat cacaaagtaa gtttttagac tattgtttac ctttccctct | acaggcagaa tagctgttgt atgttgtaac ccctggtttt gctttactga | aatcataaga ctaacatgtg aaaagtattt gtaccttcag caaagtcaca | catgcaaaaa taatgatgag tgcagaatgt tttggacttt aatctgagaa | gttatcatta acaatgttga cccaaaagat aagctgttgt gaatgggtgc | 120 180 240 300 |
| gaaacgcaaa attttcagtt atacttgtaa ttctctaaat agttgataat | ttaatggtat cacaaagtaa gtttttagac tattgtttac ctttccctct tggtttgcag tgagttactg | acaggcagaa tagctgttgt atgttgtaac ccctggtttt gctttactga | aatcataaga ctaacatgtg aaaagtattt gtaccttcag caaagtcaca | catgcaaaaa taatgatgag tgcagaatgt tttggacttt aatctgagaa | gttatcatta acaatgttga cccaaaagat aagctgttgt gaatgggtgc | 120 180 240 300 360 |
| gaaacgcaaa attttcagtt atacttgtaa ttctctaaat agttgataat ctttaacgca taccttctca <210> <211> <212> <213> | ttaatggtat cacaaagtaa gtttttagac tattgtttac ctttccctct tggtttgcag tgagttactg | acaggcagaa tagctgttgt atgttgtaac ccctggtttt gctttactga gcacacacaa | aatcataaga ctaacatgtg aaaagtattt gtaccttcag caaagtcaca attcatcatt | catgcaaaaa taatgatgag tgcagaatgt tttggacttt aatctgagaa | gttatcatta acaatgttga cccaaaagat aagctgttgt gaatgggtgc | 120 180 240 300 360 420 |

| agcttctaga | aggagatcat | ctcgatgttc | tatgcttctt | gaagggggca | gtccatgagg | 60 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| aatctccttg | ggaaagacat | ctttaaattc | ctgcaataag | ggttgaacac | taggagaaac | 120 |
| ataaatagtt | aactgattag | aattatcact | ctctctct | tgtgtatcac | tcttttcctc | 180 |
| gggtgtatca | ctcttctttt | tcatattcct | ttgtggtgcc | tcactatttt | ctttctcttg | 240 |
| ttctctcttt | tctctcattc | tgatttggtc | atcacacact | tttctagggg | atagaggttt | 300 |
| aagagtaaac | gaggaagatt | tggctattcg | tctgtagggc | tcttctttgt | tacggntcaa | 360 |
| taaacgttgc | atttgtgtag | tccacgcgtc | cagaaatatg | cgctgagatt | tctccagttg | 420 |
| atgatataca | ccaccat | | | | | 437 |
| <210> <211> <212> <213> | 5633 429 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5633 | all n locati | ions | | | |
| agcttgtaac | ctgaatagaa | aatgtccaac | tttttttag | aacccatttg | ttttttgcag | 60 |
| ccactatatt | tgtccttcct | ctagttctaa | tcattcacca | tttttagtta | agaactatga | 120 |
| tgttcctagt | tcctagacta | tgtttcagac | atttaagacc | ttttgcttta | gtatcgtcaa | 180 |
| ccatagagag | ctctgtcaat | gattccttag | tgagtctaga | aattttgggg | aaaaattgag | 240 |
| gataatttga | ttaagaaaaa | tagtgtttag | taggttatag | aataggaatt | cattctgaaa | 300 |
| tcgctttaag | ttgtgtgttt | ttagaaattc | actcaacttt | ggcacaccaa | tgtcaaatgc | 360 |
| caaccattcg | gntctaatag | ctttcctttt | tacgaactta | tcacctaaag | ctataaacaa | 420 |
| atgagaagt | | | | | | 429 |
| <210> <211> <212> <213> <223> <400> | 5634 395 DNA Glycine max unsure at a 5634 | k all n locat: | ions | | | |
| agcttcatga | tgatgaatca | tgtatgaatt | atgtagttnt | gatgatgaca | aaaagcccaa | 60 |
| aagaataaaa | ggtctgaacg | ttgaaattca | aattcaattg | tgaagagtca | catcttttca | 120 |

| taaaatgcat | tgtgtaatcg | attacatgat | tatggtaatc | gattaccagt | gacaagtttt | 180 |
|-------------------------|-----------------------------------|--------------|-------------------|------------|------------|-----|
| gaataaaagg | tcaagagatg | taactcttga | cattgatttc | ttaaggttat | aactcttcca | 240 |
| atggttttct | tgaccagaca | tgaagagtct | ataaaagcaa | gaccttgact | tgcattcaca | 300 |
| acatcttctt | gaacaacttt | tgagaaacct | ttaaaccttt | acaaccttta | caattcttta | 360 |
| agaattcttt | cctaactcat | cttcttcttc | ttcct | | | 395 |
| <210> <211> <212> <213> | 5635 338 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttaatga | aaagaaaaac | ttacctcgat | tacgactatt | gtgacgacga | cgcgacagca | 60 |
| tgaccggcgg | tggtggcaag | acgaaacacc | aatggggatc | aacatgcgcg | gagtagaagc | 120 |
| aacccaatat | tacggaaagt | actgtagcgg | caaggatggg | ggaattccaa | gagcttttaa | 180 |
| aataagggtg | aagggcattn | tttccatttc | accaaatatg | ttgggtgtac | cagcagttgg | 240 |
| gcaggtgccc | aaagccatga | tagagtcaac | tttgaggccc | actccacttc | gacagccaaa | 300 |
| cccattttt | tgtcagtacc | aactttgttt | attttt <u>t</u> a | | | 338 |
| <210> <211> <212> <213> | 5636 425 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| gttattagtt | aaagttaatg | aaacttggta | gtttgtcaat | aattgaacac | aatttcagtg | 60 |
| gtagagatga | actagtataa | atctttgtaa | cttatatgtt | tccttgtgtt | tttctgcttt | 120 |
| aaagtgacat | aaggtttaaa | tttgattttg | ttttggaaag | ttctatttgt | tttacaaagt | 180 |
| ttctcttcaa | atgataactt | tgttttgtta | aaaaaagact | tgaaaatttt | ctaaaaccac | 240 |
| aattcaatct | ctcttcttgt | gatatttgca | tttacaatat | atatatatat | atatatatat | 300 |
| atatatatat | atatatatat | atatatatat | atatatatat | atatatattc | taacactcat | 360 |
| ctaattgtct | aaggtctaat | tangagtaga | ctgtgcccaa | aaagaaaatg | cacataatgc | 420 |

| cgcat | | | | | | 425 |
|---------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210><211><212><213> | 5637 378 DNA Glycine max | | | | | |
| <400> | 5637 | | | | | |
| agcttattat | ttactttatt | ttgtttattt | tagtatttca | taaaaagaga | gctctatttg | 60 |
| actccctatt | aaataaataa | ataaaacatc | ctttttattt | tctaaaaaca | tatttatttt | 120 |
| atttacctta | aaaccattat | tttaattaat | aaaactattt | attcttattt | atttaattac | 180 |
| aaaaacctca | ttgtttttca | aaaactctat | ttatttaaaa | aaaaaccatt | tttaatttat | 240 |
| tttatgaaaa | acgggatgtt | atagaagttg | atgaggaaga | agcctagctt | gtttcaccaa | 300 |
| tcacaattgt | accacctcat | atgcaaaatt | ttgaagaatc | ttttttcaa | gattttgaat | 360 |
| acgagcatag | cttggatt | | | | | 378 |
| <210> <211> <212> <213> | 5638 451 DNA Glycine max | | | | • | |
| <223> <400> | unsure at a 5638 | ill n locati | ions | | | |
| agcttcaaga | aaaagatggc | ctcatcatat | ttcttatttc | cagaagggaa | ttctatcaat | 60 |
| agacctccaa | tctttaatgg | agagggttac | cactactgga | aaacccgaat | gcaaattttt | 120 |
| atcgaggcaa | ttgatctaaa | tatctgggaa | gccattgaaa | tagggcctta | tatacccacc | 180 |
| acagtagaaa | gagtttcaat | agatggtagt | tcatcaagtg | aaagcataac | catagaaaaa | 240 |
| cctagagata | gatggtctga | agaggataga | aaacgagtac | aatacaacct | aaaagccaaa | 300 |
| aacataataa | catctgccct | acgaatggat | gaatatttca | gagtttcaaa | ttgcaagagt | 360 |
| gctaacgaaa | tgtgggacac | tcttctatta | acacatgaag | gaactacaga | tgttaaaaga | 420 |
| tctangataa | atgcactaac | tcatgagtat | g | | | 451 |
| <210><211><211><212><213> | 5639 450 DNA Glycine max | 5 | | | | |

| <223> <400> | unsure at a 5639 | ill n locati | ions | | | |
|--|---|--|--|--|--|-------------------|
| agcttgatgg | cacactaagc | ctcacatctc | atgctaagcg | catattgcag | aaaattntgt | 60 |
| gttgtcgaaa | gcgctaagcc | cagcctgctg | cgctaagccc | cagatgctca | ctggaatttg | 120 |
| caacttcaag | ttgggcttag | catgaggtta | ggctaagcgc | ttgggttttt | aaactctaac | 180 |
| gtcacgtggg | cacgctaagc | gcagctctac | actaagcctt | ccatacaaat | ttcaattttt | 240 |
| aaaaaaacta | aaggttgagt | cacttgggtg | ttacccaaaa | accattagcc | tctctgcctt | 300 |
| tgctaacctt | gagcatttgt | gcctttttgc | tgcgtgcttg | aactgacttg | tctgcatctt | 360 |
| ccttgcttca | ttctgcattt | caatcacaat | ccaagtaagt | ggatacattt | ccatttttaa | 420 |
| tnttcattct | ttaaaccata | tgatagatga | | | | 450 |
| <210> <211> <212> <213> | 5640 379 DNA Glycine max | x | | | | |
| <400> | 5640 | | | | | |
| agcttcaaga | aagtcctctc | caagagtgac | taatgaggct | gttcataagg | ctgtgagtgc | 60 |
| ttattttctg | tagttttctg | ttcaactgct | taattcagtt | gagcaagatt | tgttaggaaa | 120 |
| tttattgtct | tattcactat | + a + + a a + a a a | | | | 100 |
| | | tattgatgat | atcttttatt | ctcttctcag | gctgctgcat | 180 |
| tgaagggttc | | | | ctcttctcag | | 240 |
| | tgatcatcgt | cgcgccacaa | atgtcagtgc | | gctcaacaaa | |
| agaagttcaa | tgatcatcgt | cgcgccacaa | atgtcagtgc ccacaattgg | tagattggat | gctcaacaaa cagactgttg | 240 |
| agaagttcaa | tgatcatcgt ccttccaatc ggtgcgtcgc | cgcgccacaa | atgtcagtgc ccacaattgg | tagattggat atccttccct agatatgcct | gctcaacaaa cagactgttg | 240 300 |
| agaagttcaa | tgatcatcgt ccttccaatc ggtgcgtcgc | cgcgccacaa ctcccaacca gcatacaagg | atgtcagtgc ccacaattgg | tagattggat atccttccct agatatgcct | gctcaacaaa cagactgttg tgagttgata | 240 300 360 |
| agaagttcaa aactgaggag ggttggcttg <210> <211> <212> | tgatcatcgt ccttccaatc ggtgcgtcgc tctcttgac 5641 411 DNA | cgcgccacaa ctcccaacca gcatacaagg | atgtcagtgc ccacaattgg | tagattggat atccttccct agatatgcct | gctcaacaaa cagactgttg tgagttgata | 240 300 360 |
| agaagttcaa aactgaggag ggttggcttg <210> <211> <212> <213> <400> | tgatcatcgt ccttccaatc ggtgcgtcgc tctcttgac 5641 411 DNA Glycine ma: 5641 | cgcgccacaa ctcccaacca gcatacaagg | atgtcagtgc ccacaattgg ctcacaagta | tagattggat atccttccct agatatgcct | gctcaacaaa cagactgttg tgagttgata | 240 300 360 |

| tgagtaaatc | ttatgctttg | aatgtgcatg | cagagattat | aagagaaaga | acatggatta | 180 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tgatcatgac | tgaaaatgtt | agttagtttg | acagattgat | tttgaaggta | ctcattagcc | 240 |
| acaacccggt | gagtgtgtga | tctttatttg | tgagagaacg | actagcattg | agtaatgatc | 300 |
| tttgtatgaa | tctctaatta | tggaatgaat | gcatgagtct | gaagatgatg | aaagtcatgc | 360 |
| ttgattgaac | agtctcttat | cacaaagctt | accttatgaa | tgattgattt | t | 411 |
| <210> <211> <212> <213> | 5642 379 DNA Glycine max | ς. | | · | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctntatat | aagggtttta | ttacctataa | ttntgcagca | ttgccgagtg | ctttgctttc | 60 |
| cttgtatgta | caaagcggtc | caatccagtc | attcatagaa | attcaagaga | agccagtagt | 120 |
| tcatcttcaa | ctacgattac | atatcttgac | tggaacagtg | gtttagtggt | ttctacagac | 180 |
| gaaaatcaac | accaggggag | aatgtgtagc | cttcaagaca | taggaggtca | ttttatgaaa | 240 |
| gtaccaatta | ttgtattcca | ggttcttctt | tgtatgcatc | tagaggtata | tgataatgaa | 300 |
| ttgtgtgttt | ggccagcctt | tggaatattg | tttttggaga | tctgaactgt | tttgtatttc | 360 |
| acggaacacc | tgtctgtgc | | | • | | 379 |
| <210> <211> <212> <213> | 5643 386 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| tcgaagaggg | tctgagaaca | tgaaaatttg | attatcctgc | tttgatgaat | gggaagccta | 60 |
| tggcaaatgg | agagaataag | aatgagggag | gaacccatgc | tgtgactatc | tgtcctatat | 120 |
| ggccaaattt | cccaccagct | caacaatatc | aatactcagc | caatatcagc | ccttttcatt | 180 |
| acccaccacc | ctatcagcca | agaacactca | atcatccata | aaggccaccc | ctatatcagc | 240 |
| cacanagcct | gcctgctgcà | cattcgatac | caaacaccac | cctctacaca | catcataaca | 300 |
| cctactaggg | aaggaatgtt | ctagtaaata | agcctacaga | attcaccccc | attccaatgt | 360 |

| catatgctgc | ttactcccct | attact | | | | 386 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5644 566 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| aagaatgact | cttcgaccga | tcgctctata | taantcnant | acttanttat | aancnanttt | 60 |
| tttctctcct | ctcgcggacc | gcatgacncc | ntgttgatgc | ccgtcgnagt | accctgcgat | 120 |
| cctctagatc | aacctgccgc | atgcaatctt | taggtacaca | gatatagtat | tacgttcttc | 180 |
| gagattccag | gctctgttag | gactgtaata | tattgatcgc | acacgcactc | cacatcgacc | 240 |
| gattgaaatt | gaaaatggca | aatcaagcct | ggctcttata | gactctccaa | gactgcccga | 300 |
| gaagaccatt | cacaagagtc | atacctttac | agaaacttaa | aaccaattta | agatataaac | 360 |
| acatcttgaa | gagttacatc | ttttgatgta | ttcataaacc | ccctcctggc | agcagacaac | 420 |
| aaatcacagt | accgactaca | caggctttac | gtgaaaggac | ggacccttcc | atctgaatgt | 480 |
| gaattccccg | tcaaggactg | gcatccatac | catactatga | tgcaatacac | ctctgaattg | 540 |
| atgaacgcgg | aactcatctg | aaaccg | | | | 566 |
| <210> <211> <212> <213> | 5645 409 DNA Glycine max | × | | | • | |
| <400> | 5645 | | | | | |
| agcttccttt | ttccctttga | ttaggattat | ctttgaagcc | tactgctgta | agtttgcgga | 60 |
| gcttctgaag | tcaatttcct | taatgtgtag | atgattctgt | cgatttcaaa | tctacctaga | 120 |
| aaagatgctt | tttgtcgata | gtttgctcct | gcagtgttgc | taccttggag | attctgctgt | 180 |
| aatgcgtaat | gaccattact | atataggatt | ttggcttaac | tatattcttg | gacactaatt | 240 |
| tcgtgtatta | tctatgtgct | gtcttattat | taacgaacaa | cacatgttaa | gatggaaatt | 300 |
| ctcaaaagga | ccaactcgac | tacttttaat | cctaggttga | gatcgtagca | actaaacatg | 360 |
| aggaaagtta | actttttatt | tctttcagat | aaaggtcact | caatatgat | | 409 |

| <210> | 5646 | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <211> | 252 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <400> | 5646 | | | | | |
| agctttataa | caatgagctg | ggaccgaatt | tatgtcagct | tcagtggtag | tatgcaaaaa | 60 |
| attctcgcac | atagcaccat | tcaggcaagt | ttctacttcc | tgaaatacat | tatgtaggaa | 120 |
| tatgatgggg | tcttcaatgt | cacacatttt | atgttttgaa | aatctatact | tatagcatga | 180 |
| tggcatatta | tcacttaatt | taagccttaa | caaagtattc | tgtattctgt | atgcttgaaa | 240 |
| tttgttttat | at | | | | | 252 |
| <210> <211> <212> <213> | 5647 305 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| agcttgtata | ggctacaaca | agaaagtgnt | tcttaagaat | gaaaacgggt | aatatagata | 60 |
| aattggccat | ggtaaacaat | tacactatca | taagtgtgtt | gctcttttcc | tcattgcttt | 120 |
| tggttttcat | gagtgcccaa | caacatcatc | atcgtattac | tttgctttta | acagaggcca | 180 |
| gacagctgct | tctgcaaata | agttgacatt | cgagaataaa | atcatgtaat | gtaattcatg | 240 |
| cccctctatt | catgtgaata | cttanataca | cgcatgcttt | gtttgcaaat | ctctgggtag | 300 |
| agggt | | | | | | 305 |
| <210> <211> <212> <213> | 5648 348 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5648 | all n locat: | ions | | | |
| agctntgatg | gagtacccta | acttaaaaag | tataccaacc | cactgaaaga | atagttccct | 60 |
| acaggagtgc | tgcttcccta | tagaggagtg | cggtacaggg | agcatggcta | agtgcacatg | 120 |
| agagaggtta | tttttgttct | tccgggtgcc | ataacaacaa | taatcttggt | atattttact | 180 |
| ccaaaacaca | aggttgtttt | taaaattatt | ctgttattcc | ttttcaaagt | agttttatat | 240 |

| ttaaatgttc | tttgtgctgt | agataaaaac | tgaaaatcag | agaataaagt | tgagtaagca | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|------|
| ccagttttca | tggggttttt | gatagtagta | ccttgggcgg | gacatgaa | | 348 |
| <210> <211> <212> <213> | 5649 378 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctnttaac | tcggaggtcc | gattcaagcg | tattatatat | cgagacgctc | gaaattaacc | 60 |
| aacggaagct | ctcgagaaat | tcaaatggtc | ataactttta | actcggaggt | ccgattcagg | 120 |
| cgcataatat | atcgagacgc | tcgaaattga | acaacggaag | ctctcgagaa | attcaaatga | 180 |
| tcataacttt | tcacacggag | gtccgattca | tgcgcataat | atatcgagac | cctcgaaatt | .240 |
| taacaacgga | agctctcgag | aaataccaag | ggtcataact | tttcactggg | atgtccgatt | 300 |
| caggcgcata | atacattgag | acgctccaaa | ttgaacaacg | gaagctctcc | aaaaattcaa | 360 |
| atggtcataa | cttttcac | | | | | 378 |
| <210> <211> <212> <213> | 5650 392 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| agcttcatga | tgatgaatca | agttgattct | tgtagctgtg | atgatgacaa | agatgatgac | 60 |
| caaaagccca | agagaatgat | ttcaagattg | agtccacaag | ttcaagatca | agtgtaattt | 120 |
| caagcttcat | gagaagaaat | caagaagatt | caggaatcac | gagaaatttg | atttctagat | 180 |
| tcatgagaag | atgaattcaa | gattcaagag | aagacatcaa | gaagacttca | caagggaagt | 240 |
| attgaaaaga | tttttcaaaa | aacaaacata | gcacaatttt | gtttttcaaa | agagtttttc | 300 |
| tcaaaatttt | ctaagttacc | agagtgtnta | ctctctagta | attgaatacc | agcttcctgt | 360 |
| aatcgattac | cagtggcaaa | gttcgatttc | at | | | 392 |
| <210> <211> | · 5651 363 | | | | | |

| <212> <213> | DNA Glycine max | | |
|----------------|---|--------|-----|
| | unsure at all n locations 5651 | | |
| agcttgagat | gaggaagtgt agaagggtga tatcttcctg cttttattgt tgacc | acaga | 60 |
| gtggtacctg | gagatatgtc gcgggggtca ggagaccttg gggacgtcag gtggg | gtgct | 120 |
| attgcccaaa | accaagettg accaateeeg acceaeeeg ggeatagteg gteag | tgaga | 180 |
| acctgtgatg | tacctaaaca ggcgagctcc tggcagtcaa cagataaaag gaaca | aagac | 240 |
| cacaaagcaa | agaggettgt ggtggetgge cagttgtgaa ttttgtgtga tatgt | ggatt | 300 |
| atggcctctg | gtaatctatt accaagggtg ggtaacngat tacaaggctt agaaa | tgaag. | 360 |
| aca | | | 363 |
| | | | |
| <210> | 5652 | | |
| <211> | 327 | | |
| <212> | DNA | | |
| <213> | Glycine max | | |
| (213) | 01, 01.10a | | |
| <223> | unsure at all n locations | | |
| <400> | 5652 | | |
| <400> | 3032 | | |
| agcttctcat | ggctatgaga ggctaaaccc tcattgttgg gagcttggca tgcca | actct | 60 |
| tggtattcgt | ttagcctatt tcatacattt ctgatcttaa tgcaatttat tattt | ttatc | 120 |
| tttgcaaaga | aatttgggag aaaagaataa ataaattatg ctcttcatgc gggaa | atcaa | 180 |
| atataaagtg | r tettagtaga tgtgggtgga aacaaagatt teattagata gaana | aaaat | 240 |
| cattaacatt | gcatcacaag tagttttggc atgctaggct ccaacataat cacat | tctga | 300 |
| attcatcttt | cggcatttaa attattg | | 327 |
| | | | |
| <210> | 5653 | | |
| <211> | 383 | | |
| <211> | DNA | | |
| <212> <213> | Glycine max | | |
| \413 > | Grycine max | | |
| <400> | 5653 | | |
| agtgcactgc | caaagctttt attccatcat gtgtttgtgc attgaagaac tccaa | attgag | 60 |
| gcacatacat | gaaaacctct gatgctcctg tgagcacata ttgtggcact tgcca | agaaaa | 120 |
| tggaaagtga | a acttgaccca tcacaattgc tacaatcttt tattgcaaac ttcaa | acctga | 180 |

| atttctctac | caaccctgct | gagaccatgg | ccatgattgc | aaggactaga | ccaattccca | 240 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tcctttgaag | ctctgtgagt | ttggatttca | ttactttggc | cacaaaaggg | tcgagggcgt | 300 |
| gcctatagat | gaagatgaag | aatgccacgc | ccaaaatgtc | gaagctggac | atgcttgctg | 360 |
| gagggatttt | gaaacttgaa | att | | | | 383 |
| <210> <211> <212> <213> | 5654 435 DNA Glycine max | · · | | | | |
| <400> | 5654 | | | | | |
| agcttctgga | aggagatcat | tttgatgttc | tatgcctctt | gaaggtggca | gtccatgaag | 60 |
| aatctcctta | ggaaagacat | ttttaaattc | ctacaataag | ggttgaacac | taggagaaat | 120 |
| agaaatagta | aactcattag | aattatcagt | agaaatttta | ctgtctttga | aatactgtag | 180 |
| attgagtggt | tcatgagcag | gtaacacttt | cctcacttca | ctcgcctctg | caaaataatt | 240 |
| aaattttctc | tcatgtgtat | cactctctct | cttatgtgta | tcactctttt | cctcgggtgt | 300 |
| atcactcttc | tttttcatat | tcctttgagg | agcctcacta | ttttctttct | cttgatctct | 360 |
| cttttctctc | attctgagtt | gggcatcaca | cacttctcta | ggggatagag | gtttaagagt | 420 |
| aaacgtggaa | gattt | | | | | 435 |
| <210> <211> <212> <213> | 5655 423 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at . 5655 | all n locat | ions | | | |
| agcttgccag | gaagaactgt | ttatgagatt | tagaattatt | gcaggactca | cttcaagaaa | 60 |
| aagataaggg | ctcacttcag | ctaaagatat | gaagaagact | ccagaataca | agtggactat | 120 |
| gatgtagtta | tttctggtaa | taagtagaca | actatcattg | ccttgtgtac | ccctataaac | 180 |
| tgtctacatt | atatagaatc | atgatataga | gtttgggaca | tctagtctcc | cctgccaatt | 240 |
| aatccaatcc | tatgattagg | aaacatgaca | aaattaatta | aaatctattc | atctaaccta | 300 |
| ctctaaattg | agatgcaaaa | ttgtactata | aagggctaac | attcaggtat | cttcacaatt | 360 |

| catccattaa | aattgagtat | ttcagtccac | ttgaacanaa | tttcagaaca | ttcatcgatc | 420 |
|---|---|-------------------------------|--------------------------------------|------------|--------------------------|------------|
| cat | | | | | | 423 |
| <210> <211> <212> <213> | 5656 274 DNA Glycine max | s. | | | | |
| <400> | 5656 | | | | | |
| agctttatag | gaagcactat | ggttaagagg | tttggtttca | aaactacttc | aagtgaaaga | 60 |
| gccaaaaatc | actgtagtac | actatgacag | tcaaagtgca | atgagtttga | acaaaaacca | 120 |
| agtgtatcat | aacaaaacaa | agcatgtgaa | tgtcaagtat | cacttcattc | aagatatgat | 180 |
| caatagtaaa | gctattgcta | ttaagaagat | atctacaagg | gagaatgttg | cacacatgct | 240 |
| cacaaaagtt | ttaccctatg | agaaggtcaa | ctat | | | 274 |
| <210> <211> <212> <213> | 5657 338 DNA Glycine max | ς. | | | | |
| <400> | 5657 | | | | | |
| agcttgtagc | atatgcaaac | ggcaataacg | ttttactcgg | atgttcgatt | gagtcacgta | 60 |
| atacatcgaa | acgctcgaaa | ttgaaaacag | aagctctgtg | caaattcaaa | cgacaataca | 120 |
| ttttaactcg | gatgtccgat | tgagctccgt | aatatatcaa | gacactcgaa | attgagaata | 180 |
| aaagctctga | | | | | | |
| | acaaattcaa | acgacaataa | | ggatgtccga | atgagtccag | 240 |
| taatatatct | | | ctttttactc | | atgagtccag acgactttaa | 240 300 |
| | | aattgagaat | ctttttactc | | | |
| <pre>cttttactcg <210> <211> <212></pre> | agacactccg | aattgagaat gcgcccgacg | ctttttactc | | | 300 |
| <pre>cttttactcg <210> <211> <212></pre> | agacactccg aatgccgatg 5658 342 DNA | aattgagaat gcgcccgacg | ctttttactc | | | 300 |
| <210> <211> <212> <213> <400> | agacactccg aatgccgatg 5658 342 DNA Glycine ma: 5658 | aattgagaat gcgcccgacg x | ctttttactc agaagagctg tgtttaca | agctaatcca | | 300 |

| cadcaddtda | agcacttcat | taatttataa | aaaataatga | aaaaagatat | aaaattggag | 180 |
|----------------------------------|-----------------------------------|-------------|------------|--------------|------------|-----|
| | | | | | | 240 |
| tcaggggtaa | ttttgtaaat | aggagtagta | gcaaccaaat | aataaattaa | aaaagagatt | 240 |
| ttttatcttc | aactttttca | tttatattga | atgcgtgttt | tattttgaaa | tggtgatagg | 300 |
| tcgagggttt | tgattcagga | tcaaatgtat | tggggggtgg | ta | | 342 |
| <210> <211> <212> <213> | 5659 438 DNA Glycine max | ς. | | | | |
| <400> | 5659 | | | | | |
| agctttgcta | gttttttgtt | cccttagaat | tatcatattt | ccctagttta | tagtttaagg | 60 |
| acttggtagt | attttcaaaa | caaataacca | atgcacttac | atggattgtt | cttaatactc | 120 |
| atgggttata | ttggttgtgc | cataaccttt | ttttcttgga | tttaaaaaga | aaccttttt | 180 |
| ttctctatat | tatttcttaa | gcaaataaag | tgtatagttt | aagaatcgcg | atattaggtt | 240 |
| atttaatgtt | gtcatttatt | ggttgttttc | tttattatca | atgtaatttt | ccatgcatat | 300 |
| gtattatact | atcatataca | aatattctag | atagcgatgt | aggatcttac | agtccgagtt | 360 |
| acaattctcg | agtttcaaat | ttttaactcc | catccgatct | tacgaaaatc | tcgatttgac | 420 |
| accttgctct | atatatat | | | | | 438 |
| <210> <211> <212> <213> | 5660 417 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5660 | all n locat | ions | | | |
| agcttaagct | ccttcaacta | cacaaggctc | ttaatatttg | aagagtatcc | tagtggaacc | 60 |
| ttcacccgac | gaagacactg | acaaaaactt | atcttctcct | tcttggacaa | agtatggcag | 120 |
| gctgggggca | tataggttca | ttccatcact | gtctagtcca | agtctaagat | ttcttggctc | 180 |
| attcccgaaa | tccggataca | aaccatcaat | cttcttccac | tgggagcaat | cagccggatg | 240 |
| acagaccatt | ccatcagaaa | tccttccatt | tgcatgtcat | gtaaggtctt | ttgcgtcatc | 300 |
| ctcgttagca | aagagacgct | tannaccttg | gaataattga | agataccaca | naaccttcgc | 360 |
| tggnggaccc | ttgttggagt | tntcatcaga | aatgctntcc | : tcttaatcct | tgacttt | 417 |

| <210> <211> <212> <213> | 5661 285 DNA Glycine max | |
|---|---|-----|
| <400> | 5661 | |
| agctagacgt | tgatgtagct tgtggacatg ttcttgatga gctctattct accactgtcg | 60 |
| cttacataag | gctaacagac tctattactt attgtggcca ttccacctcc cctaaaagat | 120 |
| taaacactcc | attgggattg ttgtactgtg ccagatggaa gaacagtatt cgtgaaaacc | 180 |
| ccgctcccgc | cgtcaaatct ctatactcgt gctggattaa ccattaccct aacgtatgag | 240 |
| acatgcttct | ctactctgcc ttaagcgtta cgactatggc tgctc | 285 |
| <210> <211> <212> <213> <223> | 5662 421 DNA Glycine max unsure at all n locations 5662 | |
| <400> | tttgttctga ttgcatgatg ctatgatagt tgatagttaa aatagtgtta | 60 |
| | | 120 |
| | tttcatacaa tgtatgttgc tctggttagg atttgatggc ctaattgtag | 180 |
| | catgatgatg aacctagcaa ttttgacgat gccaaaagac caagtgattg | |
| attcaagact | tcaagatcaa gcatgatgaa tctaatccaa gattcaagat tcaagagaag | 240 |
| aaatcaagaa | gcaataagtc aagacttcat atatgataag tattataaga ttctttcaaa | 300 |
| aacaaaatag | cacagttttt gtatacaaaa gaattttctc acattcttta agttaccaga | 360 |
| gtgattactc | tctggtaatc gattacctgt tatcagtaat cgattaccan ttgtcatacc | 420 |
| С | | 421 |
| <210> <211> <212> <213> | 5663 440 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5663 | |
| agcttaagct | cetteaactg cacaaggete ttaatatttg aagagtatee ttgtagaace | 60 |

| ttcacccgac | gaagacactg | acaaaaactt | atcttctcct | tcttggacaa | agtatggcag | 120 |
|-------------------------------|----------------------------------|-------------------|------------|------------|------------|-----|
| gctgggggca | agtaaatttt | cttcccatca | gaccttggat | gcaactatga | tctgataccc | 180 |
| atatcagtta | gatcttgacg | ggtattcaag | ccatccttcg | tcttgccttg | aatgttaagg | 240 |
| agcgtcccaa | tcacactgtc | acaaacattt | ttctccacat | gcataacatc | aatacaatgt | 300 |
| ctaacgtcaa | gatcacacca | gtacgaaaga | tcaaagaaaa | tggacctctt | cttccatatg | 360 |
| caactctgac | ttttatcctc | tctttgggtc | ttcccacata | cagngntcag | gtgttgaacc | 420 |
| cgctgatata | cctgctcacc | | | | | 440 |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | | | |
| <400> | 5664 | | anaattaaa. | tetataetta | aaatatotto | 60 |
| | | aagtcccact | | | | |
| acgtccacct | gttaatatat | catcțtgtaa | aactgatgca | gaggggttta | cattatctac | 120 |
| aatctcagct | aggggttctc | ttatatttga | gccagccatt | tctttggaat | caatgcccat | 180 |
| ttggcatgta | ccagcaatct | catccacatt | ttcattntct | tcagtaatgc | agggaaggtc | 240 |
| taattttaaa | ctcttacgct | ttcctgaact | gcctaagttt | gaattaattc | gatcccaaag | 300 |
| agtttgaact | gaagaagtgt | actgaccctt | gcaatttggt | tgcaatcaga | aagggacctc | 360 |
| ggc | | | | | | 363 |
| <210> <211> <212> <213> | 5665 394 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5665 | all n locat | ions | | | |
| agcttgttac | aaataaacat | attaataact | taagtgcagt | agtgcacaca | atgggagatg | 60 |
| tgctcttgta | aaggtgcata | ccacgagagg | caccttcatt | aggacacaca | atgggagaag | 120 |
| agccaaacca | tattttcttt | agagctaata | tgcaaaagga | ctggttggaa | cagagccaac | 180 |
| atgttgttag | acaggttcaa | acgatgtcaa | tctgtggtaa | gagtagggcț | ggaacagaat | 240 |

| | | | | | | 200 |
|---------------|-------------------|--------------|--------------|------------|------------|-----|
| tatacagttc | gaaatgtagc | tggaacagag | tgataaaagt | gagaagaaaa | acaatatatg | 300 |
| ggttttgtgg | ggttgaataa | ctatttaatg | agactcatan | acttgagaca | tganactctc | 360 |
| ttcaaggtgg | ataccatggc | cctgatatgg | gttt | | | 394 |
| | | | | | | |
| <210> | 5666 | | | | | |
| <211> | 388 | | | | | |
| | DNA Glycine max | ζ. | | | | |
| 12137 | 01 , 01111 | | | | | |
| | | all n locat: | ions | | | |
| <400> | 5666 | | | | | |
| agcttgtaac | atatcaagga | aaaaatgctc | tgatttcctg | aatcttttga | ttagaaagga | 60 |
| | | | | ~t~t+t>>>t | atatttaaat | 120 |
| gaagaaagtt | atgattatta | aattaataaa | ctattatatg | gtgtttaaat | gtatttaggt | 120 |
| gcctaactct | ggaactcttt | caaccttgac | atctttatat | ggtgtttaaa | tacatttgga | 180 |
| | | | | | | 240 |
| ttttgaataa | ttggtgaaat | taaaatgacg | aaaataatgt | tttataagct | geegeeeee | 240 |
| catacacaaa | tttttatctt | ttatttttat | taaatttaat | ataatgtgtg | ttgcacttcc | 300 |
| atgttgccat | ttgcataaca | gtatgcaact | gtactgttag | ccattgttgc | atttattcgt | 360 |
| ttgggttctc | tttggcntat | atctatcg | | | | 388 |
| | | | | | | |
| <210> | 5667 | | | | | |
| <211> | 267 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 5667 | | | | | |
| atatttataa | cacttggctg | ttcagcgtgt | gt.ct.cgccca | tattctacac | tggtagcacg | 60 |
| | | | | | | |
| gcttatcaca | gagcattcga | ctcaggatta | tcatacggta | gcccatcttc | atcgggacta | 120 |
| agacttcttt | ttgt.cgt.caa | tagcattato | ttcatggcac | tgggtttcgt | cattggctac | 180 |
| | | | | | | 240 |
| ccagttgctt | cagcttcagg | taaaaattat | tttcaaattt | aatgataago | ccttttattt | 240 |
| agttcaattn | tgataacgac | aaaactt | | | | 267 |
| | | | | | | |
| <210> | 5668 | | | | | |
| <211> | 270 | •• | | | | |
| <212> | DNA | | | | | |
| ∠213 ~ | Glycine ma | Y | | | | |

| 1 | unsure at a | all n locati | ons. | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agctttgcac | gtatcagtca | agtgtatgga | ccatgtcgta | gccaaagtgc | tcatcgataa | 60 |
| tggttccagt | ttaaacgtga | tgcctaagag | cactttggag | aaattaccat | tcaatgcttc | 120 |
| ccacttaaag | ccaagttcaa | tggtggttcg | tgccttcaac | ggcacccgcc | gagaggttag | 180 |
| gggaaagatc | aatctcccag | tacaaatagg | ccctcacacc | tgtcaagtca | ccttccaaat | 240 |
| aatggatatt | aaccccncct | acagctgtct | | | | 270 |
| <210> <211> <212> <213> | 5669 376 DNA Glycine max | ĸ | · | · | | |
| <400> | 5669 | | | | • | |
| agcttttgca | tgacataaca | atagcatcat | attcttgaag | aggctcactt | ttctgagtca | 60 |
| tcatcttcta | attcagctat | atccagggaa | tctcaaacaa | tagaaattga | agccgaagtc | 120 |
| atggctgaag | agcaacatcg | acgagtgacc | ctggaagatt | actcaagtac | atctgtgccg | 180 |
| cagttcttta | ctagcattgc | acgaccagag | gttcaagcac | agaatataac | ctatccacat | 240 |
| tcattaattc | agaacaattt | gtttcatggt | ctgcccaatg | aagacccgta | tgcatatcta | 300 |
| gccacttata | ttgatatttg | caacactgtc | agactggctg | gcttgcttga | ggatgctcgt | 360 |
| aaattgagct | tgtttc | | | | | 376 |
| <210> <211> <212> <213> | 5670 448 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5670 | all n locat | ions | | | |
| agcttcctct | ctaagcttct | tatccaagac | actctcttgg | tggtgaagct | tttccttcca | 60 |
| tggcttattc | tctagtggat | ggcacctcct | ctcacctctt | cttctttatc | ttctgctaca | 120 |
| actccatggc | taaaaatcac | cattgaaaga | ccttattgaa | gctcaaagat | ccagcctcca | 180 |
| taggagcttc | tcaagcaagc | ttccatcact | atcatatctg | aagaagttga | tataaatgtt | 240 |
| aaaaatgagg | aagatgttgg | cgtgaaagta | gaacacattg | attgctctta | tgtctttaat | 300 |

| acttctcagg | tatttgtcta | atttggtgtt | ggaacagtaa | ttatattaca | taaatgtgca | 360 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttgatctcag | actttctttg | aattgtgtta | tagttggttg | ctactcgtga | tgaagtttta | 420 |
| cattgngcac | gatcggtggc | tcatgaaa | | | | 448 |
| <210> <211> <212> <213> | 5671 352 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttccatc | aggttattaa | agctatcctg | atgactttcg | aactcgcacc | aggtctcaaa | 60 |
| attaactttg | caaaaagcag | ttttggagca | ataagagtgc | ctgatcagtg | gaagcaactt | 120 |
| gcagccaatt. | acttgaattg | taatttgttg | gccattcctt | ttgtgtactt | gggcataccc | 180 |
| attggggcaa | acctgaggcg | atgtcagttg | taagatccca | tcattaataa | gtgtgagaga | 240 |
| aaattagcta | agtggaagca | aagacacgtt | tcctttgcgg | ggagagtgac | ccttatacag | 300 |
| tcgggactaa | catcgattcc | catttacttc | ttttcattnc | tttagggccc | ta | 352 |
| <210> <211> <212> <213> | 5672 333 DNA Glycine ma: | × | | • | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| agcttgagat | gaggaagtgt | tgaagggtga | tacttcctgc | ttttattgnt | gaccacagag | 60 |
| tggtacctgg | agatatgtcg | cgggggtcag | gagaccttgg | ggacgtcagg | tggggtgcta | 120 |
| ttgcccaaaa | ccaagcttga | ccaatcccga | cccaacccgg | gcatagtcgg | tcagtgagaa | 180 |
| cctgtgatgt | acctaagcag | gcgagctcct | ggcagtcaac | agataaaagg | aaaacaagac | 240 |
| cacaaagcaa | ggaggcttgt | ggtggctggc | cagctgtgac | atttgtgtaa | tatgtggatg | 300 |
| gtggcctctg | gtaatcgatt | acaaggctta | aaa | | | 333 |
| <210> <211> <212> | 5673 454 DNA | | | | | |

| <223> <400> | unsure at all n locations 5673 | |
|-------------------------------------|---|-------|
| gctttggagt | ttccaagagc caattcgtct tcttcttttg ttcagacttc ttctggcttc | 60 |
| aattcatcag | tgggctttcc ttctgtgtcc agcatcttgg gatgttccca gcctttgatg | 120 |
| acagctttcc | aggttctgct atccagtgat ttgaggaagg ccaccatcct tgctttccag | 180 |
| tattcatagt | tggttccatc taggattggc ggtctgttca ctggtcctcc ttctttctcc | 240 |
| atgttcatca | gaatttatct ccctagatct cactctgtga tttcgagtgt ttgctctgat | 300 |
| accaattgaa | attctgatac tgnggacaga tgtcgtaccg gatgtcacga catctcactt | 360 |
| cagaacatgc | agattagatg cgttcgtctg aacagattac acatgtaaat aacacaagag | , 420 |
| gattgttacc | cagttcggcg caacttccct acat | 454 |
| <210> <211> <212> <213> <400> | 5674 437 DNA Glycine max 5674 | |
| tagcttctgt | attaattaaa tatgacgagt atatgtatca aaactttgga cagaacgca | a 60 |
| catcaatggc | tgactacatg catatagttg tgactagtta agccagcgac ttgcaccag | g 120 |
| catcattaat | ttattcctct aaaagcaagg gaaattgaaa atgaacaaaa aatatggat | 180 |
| ccaacaaaca | taccacatga acccaagatg agatgagaga gcccgcaatc gttggaatc | 240 |
| tgcacttcat | cttttgcaaa gcttgagtca ccaaccttta attatataat agagggtta | g 300 |
| catgccataa | acaatcctaa tgtgaagaag aaggtgcaat acttgccctc gcagagaat | a 360 |
| tggaagtcct | tettettett atatgacaga agagaagatg gtagtetage etaegettt | a 420 |
| gaaatatggg | g atctatg | 437 |
| <210> <211> <212> <213> <223> <400> | 5675 415 DNA Glycine max unsure at all n locations 5675 | |
| agcttattct | aaagataaca ttaacttatg catttcaatt tttgtttaaa attatatga | a 60 |

| acatcttcta | taatcaggtc | aaatgaaaaa | ccattatttc | gaatacttaa | atgatcaaaa | 120 |
|-------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| gattttagag | ttgcgttccc | agaaaggtat | tcaaacttca | actaaaaaat | acaatagttt | 180 |
| acagactata | tccatatatt | ctcgagcaaa | agtgttattg | ataatatgaa | gatgaagtaa | 240 |
| agcaaatagc | cgcgagctac | tcatcatatt | ccattaagag | tgacaacaac | tgtacgcgga | 300 |
| gtaggataat | cccgatgctc | acanagccat | ataccctaag | caaaatggaa | gattaaaatt | 360 |
| tattaacaat | tgtgaagcta | taataatcta | gactcacggt | tattactatt | aatat | 415 |
| <210> <211> <212> <213> <400> | 5676 367 DNA Glycine max | x | | | | |
| | | tctcttttcg | atgatgacaa | cttctgagat | caagatacat | 60 |
| | | | | | | 120 |
| | | tcgatcactc | | | | |
| tgaatgtatg | cttctcttaa | aatctaagcg | attactcatg | tgagttcttg | atttaatccc | 180 |
| tatttctctc | cccctttggc | atcaacaaaa | agccaaagtg | cgtgacatat | ttgaagcata | 240 |
| cacatataac | taagcctcca | taccacattc | atggaagaat | atcaaccaca | tcatgaagca | 300 |
| agaaccatga | agtaacaacc | ctgaatagat | taattataaa | accacatagg | taataacata | 360 |
| cttaata | | | | | | 367 |
| <210> <211> <212> <213> | 5677 391 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5677 | all n locat | ions | | | |
| agcttacgca | agaattnttt | tataaccaac | tatttagcat | tagcaaaaaa | taaactctaa | 60 |
| tttgaagtta | gaattgcatt | tgcatcaaca | aacaacgata | tttaacataa | tgtcaactac | 120 |
| gtggcattta | atgttgacga | gtgatttgat | cgttttaaag | tagcaacaag | ttagccgatg | 180 |
| cttataagat | atttattttg | catagtaaag | ctatttcaaa | atggtttagc | acattaatgc | 240 |
| atgattaatg | taattgctga | agcaacatat | gaataaataa | aataacacac | tttctcttgc | 300 |

| catcatttt | ccttcaccct | ttgtcatcct | gctccctggt. | catactacca | tactntgntt | 360 |
|---|--|--|--------------------------|--------------------------|--------------------------|-------------------|
| cgtncctatt | catteteett | catatcacac | a | | | 391 |
| <210> <211> <212> <213> | 5678 418 DNA Glycine max | ς | | | | |
| <400> | 5678 | | | | | |
| agctctgctg | ttcaattatt | gtatataatt | tatgaatata | gggtgaagaa | ggagatcaaa | 60 |
| attagtgttt | aaaggacatt | aaagactcga | tgaacataat | atttaagata | ggatttaaag | 120 |
| aacaataatg | attatattat | gatatgacta | acaaacatta | tacacttgcc | ttcgcataac | 180 |
| attgtgtgtc | aaggtacatt | cttcactaat | ttcatttgtt | acaccttaat | aaaaaagcaa | 240 |
| agcttttaat | aatggcttct | ctccttcaac | tgcgttcaaa | taagcactca | atattctaat | 300 |
| tcgaatatgc | agcatcaaca | attgcttgct | gcaatgtctc | ttaagtgagt | tggttaaagg | 360 |
| tttttttt | actactgaaa | atggaatgtg | gatgcatatt | ttatcctgag | acatattt | 418 |
| | | | | | | |
| <210> <211> <212> <213> | 5679 263 DNA Glycine max | × · | | | | |
| <211> <212> | 263 DNA | × | | | | |
| <211> <212> <213> <400> | 263 DNA Glycine max 5679 | | ttgatttggg | acttgtagga | tttgatttgg | 60 |
| <211> <212> <213> <400> agcttgtctt | 263 DNA Glycine max 5679 tggtttagac | atgtttggat | | acttgtagga acttatgcag | | 60 |
| <211> <212> <213> <400> agcttgtctt gcaagattgg | 263 DNA Glycine max 5679 tggtttagac atgagaggaa | atgtttggat gggtgatttt | cgaaatctgc | | aatttttgct | |
| <211> <212> <213> <400> agcttgtctt gcaagattgg gtaaaattgt | 263 DNA Glycine max 5679 tggtttagac atgagaggaa gcagcagaat | atgtttggat gggtgatttt tttgcacaag | cgaaatctgc tgcagaaaaa | acttatgcag | aatttttgct tggttggctg | 120 |
| <211> <212> <213> <400> agcttgtctt gcaagattgg gtaaaattgt tggaaagtct | 263 DNA Glycine max 5679 tggtttagac atgagaggaa gcagcagaat | atgtttggat gggtgatttt tttgcacaag gagttctgga | cgaaatctgc tgcagaaaaa | acttatgcag tgcttgtgtg | aatttttgct tggttggctg | 120 180 |
| <211> <212> <213> <400> agcttgtctt gcaagattgg gtaaaattgt tggaaagtct | 263 DNA Glycine max 5679 tggtttagac atgagaggaa gcagcagaat agtgcagaat | atgtttggat gggtgatttt tttgcacaag gagttctgga ctt | cgaaatctgc tgcagaaaaa | acttatgcag tgcttgtgtg | aatttttgct tggttggctg | 120 180 240 |
| <211> <212> <213> <400> agcttgtctt gcaagattgg gtaaaattgt tggaaagtct gtaggcttat <210> <211> <211> <212> | 263 DNA Glycine max 5679 tggtttagac atgagaggaa gcagcagaat agtgcagaat gtactagaga 5680 376 DNA | atgtttggat gggtgatttt tttgcacaag gagttctgga ctt | cgaaatctgc tgcagaaaaa | acttatgcag tgcttgtgtg | aatttttgct tggttggctg | 120 180 240 |

| ttaacctagg | gaattaaaaa | aaacttaatg | gctgagtgta | actgaaattg | tggcaaccaa | 120 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| aagtcacccc | caacagccaa | caagtcagcc | accatttggt | ctcccaaaag | gctgatgcct | 180 |
| attgttgcca | atgggccctt | attacaactt | gaactaaacc | taactaaagc | ccttttagtt | 240 |
| gattaaccca | aaacatattt | ttggcagcca | actctcaagg | attgggcatt | attagacaaa | 300 |
| ctaacactct | aaaatgagac | aaggtggggc | atttagtcct | cctcatttgg | catgaacact | 360 |
| cacaccttgg | actttt | | | | | 376 |
| | | | | | | |
| <210> <211> <212> <213> | 5681 366 DNA Glycine max | ζ | | | | |
| <400> | 5681 | | | | | |
| gcaagcttgt | ggttgttgtg | ttagtattct | atccttggtt | tagatttcac | aaagtctctt | 60 |
| aagtcttcat | tttgatgttg | cacaccaaat | cttctcaagg | acattctcag | ctttccactt | 120 |
| gtcatctctg | tgtgtggcag | catatggaaa | gtgagatgct | atcaacatca | gtcttctaat | 180 |
| gtgtcctctg | tatgtgtggc | agcatatgaa | agacatgata | ttgtctttga | ggtatagtag | 240 |
| agaacaatta | tgaacttcag | tgattaaagt | caaaatcttc | atcatcttga | tgcagactct | 300 |
| gatgaaactt | cattctgatc | ctgtatgcgc | attgcaacct | ttgaaacatc | ttatatgtaa | 360 |
| ggccat | | | | | | 366 |
| 010 | 5600 | | | | | |
| <210> <211> | 5682 450 | | | | | |
| <212> | DNA | | | • | | |
| <213> | Glycine max | x . | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| agcttcccag | atccgatcac | ggaaggactt | gtcaactgcc | ttcattaggt | agtaccagta | 60 |
| caatacggac | atggctcccg | atcggaacca | gcttcagagt | atgactaagc | gagagcatga | 120 |
| gtccattaag | gaatatgccc | aaagatggag | agatctcgca | gcccaagtcg | taccgcctat | 180 |
| gatggagagg | gagatgatca | caattatggt | agatacgtta | cccatattct | actatgaaaa | 240 |
| gctgataggc | tacatgccag | ctaactttgc | ggatctcgtc | ttcgccggag | aaaggattga | 300 |
| atccggacta | cgaaaaggca | agttcgaata | tgctgccaac | atggtcccca | acaacaacag | 360 |

<210>

5685

| aagagcccca | gtagtgggtg | cgaggaaaaa | ggaaggagac | gcccacgcgg | tcaccaccgc | 420 |
|---|---|---|---|---|--|--------------------------|
| cccgacgtgg | atgaaagcac | cccanaatat | | | | 450 |
| <210> <211> <212> <213> | 5683 366 DNA Glycine max | ς | | | | |
| <400> | 5683 | | | | | |
| gagcttgttt | tgatgcctga | gaacacaaga | gtgggtgcat | attgtgtgaa | gctacttttt | 60 |
| ttggccagca | atcagctatg | agccacgcta | taatagtttc | catacaccta | tacgtgtagg | 120 |
| aattttgttc | atcacggaca | tgtaagtgta | gaataggtag | caaaatacct | ttggcaattt | 180 |
| acactttggg | tatggtagca | aaatacttgg | atgtatgtac | atgtaatttc | tggtagtcaa | 240 |
| aatgtctcac | aaaaatatat | atatatgttg | catgttatgt | aaagaaatac | cttacaaaga | 300 |
| tacctttgaa | tttgaatgca | attttagtca | gcacaagaat | atatacttga | atttgcatgc | 360 |
| ggcttt | | | | | | 366 |
| <210> <211> <212> <213> | 5684 459 DNA Glycine ma: | × | | | | |
| <223> | | | | | | |
| <400> | unsure at 5684 | all n locat | ions | | | |
| <400> | 5684 | | | atatcataca | gttgctcatt | 60 |
| <400> | 5684 aagcaattat | ctaatcattc | ttatccactc | atatcataca ctgcatatca | | 60 |
| <400> agctcgatca caaatcattc | 5684 aagcaattat tcaaacactc | ctaatcattc atttcataaa | ttatccactc | | ttttcaacca | |
| <400> agctcgatca caaatcattc attcactgtt | 5684 aagcaattat tcaaacactc caaaccagct | ctaatcattc atttcataaa ttttgtacaa | ttatccactc aaacaatcta gcaaacaact | ctgcatatca | ttttcaacca aaatttaaag | 120 |
| <400> agctcgatca caaatcattc attcactgtt aactgaaaca | aagcaattat tcaaacactc caaaccagct taaaaactga | ctaatcattc atttcataaa . ttttgtacaa aatttaaaag | ttatccactc aaacaatcta gcaaacaact actgaacata | ctgcatatca caaagtacta | ttttcaacca aaatttaaag taattgaaaa | 120 180 |
| <400> agctcgatca caaatcattc attcactgtt aactgaaaca taaactaaaa | aagcaattat tcaaacactc caaaccagct taaaaactga tgttcaaaat | ctaatcattc atttcataaa . ttttgtacaa aatttaaaag gcacaaattt | ttatccactc aaacaatcta gcaaacaact actgaacata aaatgtcctg | ctgcatatca caaagtacta aatcataaaa | ttttcaacca aaatttaaag taattgaaaa tgctcctgtg | 120 180 240 |
| <400> agctcgatca caaatcattc attcactgtt aactgaaaca taaactaaaa catgctcatt | aagcaattat tcaaacactc caaaccagct taaaaactga tgttcaaaat gagatccaac | ctaatcattc atttcataaa . ttttgtacaa aatttaaaag gcacaaattt acctgagcag | ttatccactc aaacaatcta gcaaacaact actgaacata aaatgtcctg ctggtgaatc | ctgcatatca caaagtacta aatcataaaa cccctgtggt | ttttcaacca aaatttaaag taattgaaaa tgctcctgtg ggctactcta | 120 180 240 300 |

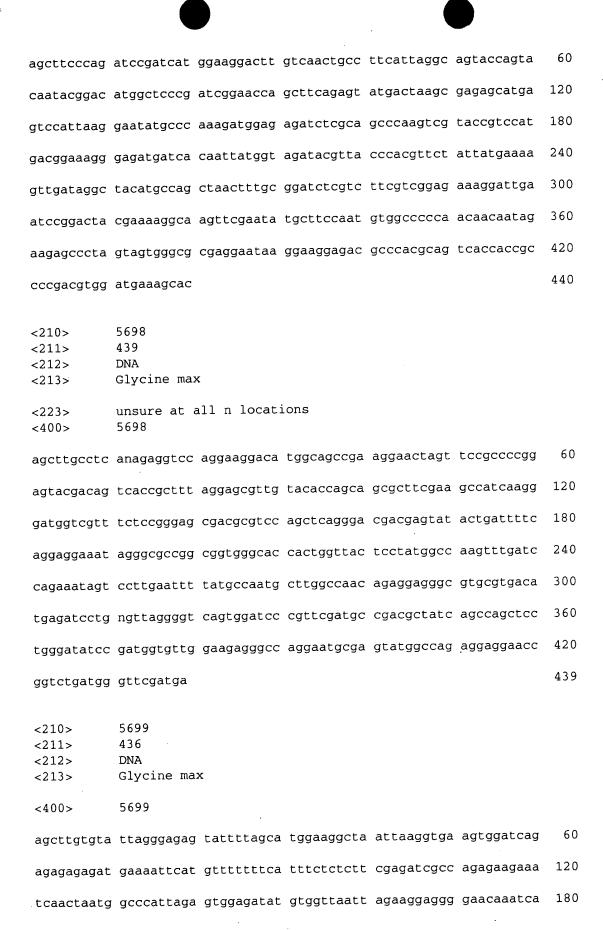
| <211> <212> | 448 DNA | | | | | |
|---|--|--|--|--|--|--|
| <213> | Glycine max | ζ | | | • | |
| <400> | 5685 | | | | | |
| agcttaataa | atctatatat | ggtttaaaat | atgcctccca | tatttggtac | cttaagtttc | 60 |
| atgggattat | ttcttcattt | ggttttgatg | aaaaccccat | ggatcaatgc | atataccaca | 120 |
| aggttagtgg | gagtaaaata | tgttttcttg | ctttatatgt | agatgatatt | ttacttgcac | 180 |
| ccaatgatcg | gggtttgcta | catgaggtaa | aacaatttct | ctctaagaat | tttgacataa | 240 |
| aggatatggg | tgatgcatct | tatgtcattg | gcattaagat | tcatagagat | agacctcaag | 300 |
| atattttagg | tctatcacag | gaaacctata | ttaacaaaat | tttagataca | tttcgtatga | 360 |
| aagattgttc | accagttgtt | gatcctattg | tgaaaggtga | tagggttaat | ttgaaccaat | 420 |
| gcccaaagaa | tgactttgag | agggaaca | | | | 448 |
| <210> | 5686 | | | | | |
| <211> | 442 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma: | x | | | | |
| <223> <400> | unsure at 5686 | all n locat: | ions | | | |
| agcttcaaca | | | tagaactact | taacataaat | ttaataaaac | |
| | tcagaccact | tccagggtgc | tygaactact | ccacatygat | ccgacggggc | 60 |
| ctatgcaggt | | | | tgttgttgtg | | 60 120 |
| | tgaaagcctt | ggaggaaaga | ggtatgccta | tgttgttgtg | | |
| ccagatttac | tgaaagcctt ctgngtcacc | ggaggaaaga tttatcagag | ggtatgccta agaaatcaga | tgttgttgtg aacctttgaa | gatgatttct | 120 |
| ccagatttac | tgaaagcctt ctgngtcacc aagacttcaa | ggaggaaaga tttatcagag agagaaaaag | ggtatgccta agaaatcaga actgtgtcat | tgttgttgtg aacctttgaa caagagaatc | gatgatttct gtattcaaag | 120 180 |
| ccagatttac agttgagtct atggcagaga | tgaaagcctt ctgngtcacc aagacttcaa atttgaaaac | ggaggaaaga tttatcagag agagaaaaag agcagattca | ggtatgccta agaaatcaga actgtgtcat ctgaactctg | tgttgttgtg aacctttgaa caagagaatc cacatctgaa | gatgatttct gtattcaaag aggagtgacc | 120 180 240 |
| ccagatttac agttgagtct atggcagaga atgagttctc | tgaaagcctt ctgngtcacc aagacttcaa atttgaaaac tgcagccatt | ggaggaaaga tttatcagag agagaaaaag agcagattca acaccacaac | ggtatgccta agaaatcaga actgtgtcat ctgaactctg agaatgggat | tgttgttgtg aacctttgaa caagagaatc cacatctgaa agttgagagg | gatgatttct gtattcaaag aggagtgacc ggcatcactc | 120 180 240 300 |
| ccagatttac agttgagtct atggcagaga atgagttctc ccttgcaaga | tgaaagcctt ctgngtcacc aagacttcaa atttgaaaac tgcagccatt | ggaggaaaga tttatcagag agagaaaaag agcagattca acaccacaac gtcatgcttc | ggtatgccta agaaatcaga actgtgtcat ctgaactctg agaatgggat | tgttgttgtg aacctttgaa caagagaatc cacatctgaa agttgagagg | gatgatttct gtattcaaag aggagtgacc ggcatcactc aaaaacagga | 120 180 240 300 360 |
| ccagatttac agttgagtct atggcagaga atgagttctc ccttgcaaga | tgaaagcctt ctgngtcacc aagacttcaa atttgaaaac tgcagccatt ggctgctcgg | ggaggaaaga tttatcagag agagaaaaag agcagattca acaccacaac gtcatgcttc | ggtatgccta agaaatcaga actgtgtcat ctgaactctg agaatgggat | tgttgttgtg aacctttgaa caagagaatc cacatctgaa agttgagagg | gatgatttct gtattcaaag aggagtgacc ggcatcactc aaaaacagga | 120 180 240 300 360 420 |
| ccagatttac agttgagtct atggcagaga atgagttctc ccttgcaaga ctgaagccat <210> <211> | tgaaagcett ctgngtcacc aagacttcaa atttgaaaac tgcagccatt ggctgctcgg gaacacagca | ggaggaaaga tttatcagag agagaaaaag agcagattca acaccacaac gtcatgcttc | ggtatgccta agaaatcaga actgtgtcat ctgaactctg agaatgggat | tgttgttgtg aacctttgaa caagagaatc cacatctgaa agttgagagg | gatgatttct gtattcaaag aggagtgacc ggcatcactc aaaaacagga | 120 180 240 300 360 420 |

| agcttctcca | tatattattc | ccctgaatcg | tgacttccgt | ttgaaaagtt | atgaccattt | 60 |
|-------------------------------|----------------------------------|-------------------|------------|---------------|------------|-----|
| gaatttctcg | agagcattcg | ttgttcaatt | tcgagggtgt | cgatgtatta | tgcgcctgaa | 120 |
| ccggacttcc | gtgtaacaag | ttatgaccat | atgaatttct | caagagcttt | cgttgttcaa | 180 |
| tttcaagcgt | ctagatatag | tatgcgcctg | aatcggactt | ccgtgtgaca | agttttgacc | 240 |
| atttgaattt | ttcgcgagca | gtcgtggttc | aatttcaacc | ttctcgatat | attatgcgcc | 300 |
| taaatcggac | ttccgtctga | aaaagtatga | ccatttgaat | ttctcgagag | cattcgtttg | 360 |
| ttcaattcaa | gcgtctcgat | gtattttgcg | cccgaatcgg | acttccgttg | acaatttatg | 420 |
| accatctgaa | ttt | | | | | 433 |
| <210> <211> <212> <213> <223> | | k all n locat: | ions | | | |
| <400> | 5688 | | | ++ a+++ a > > | aactttctca | 60 |
| | | | | ttctttgaaa | | |
| | | | | | actaaactca | 120 |
| cctccttaaa | aataattacg | gataaaaata | acacaacaaa | tataatcaaa | catcaaacat | 180 |
| aattactaat | aatatgtaga | tatatatatc | agggtgttac | acgccatatg | atgtgtaaag | 240 |
| taagggaaat | ctcttgttct | tgtttattct | gaagttaatt | tagcttttat | acctaaagat | 300 |
| acttgatgga | tagattctgg | tgctactact | cacataagtg | taaccatgca | gggttgcctg | 360 |
| tggatccgat | tgccaagtga | tgatgaaaga | ttcatatttg | ttggcgatga | caaaaa | 416 |
| <210> <211> <212> <213> | 5689 297 DNA Glycine ma | × | | | | |
| <400> | 5689 | | | | | |
| agctttaacg | aatgtaatac | acatcttctt | tattctttgt | gattcttgac | tccatttcat | 60 |
| tgaaccgcat | atccacttgt | aattccaaat | tgtcaaacct | ctcaccaaca | aaggtttgaa | 120 |
| gaccatcaaa | cctgtctaaa | atctttgaaa | ggagagatga | atcctctcca | tcatgtcctt | 180 |

| cttcaccaac | atgtcgagta | cctttcttca | cccaagaacc | atcttgttcc | tttcgataac | 240 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| aaaaagatgc | tatgactgaa | gagcctataa | gataagatct | cttgatttga | acataat | 297 |
| <210> <211> <212> <213> | 5690 244 DNA Glycine max | | | | | |
| <400> | 5690 | | | | | |
| aacttgtatt | gagatettge | aaccgccgca | tttagatata | gatgcatacc | atgggccagg | 60 |
| gtatttggaa | accatgatga | tgcctgatta | tgagtggcca | ttgatgtggc | ggtctgctcc | 120 |
| tgtaatacct | acaaatcact | tgtactcata | acacatcttt | ctattcacgt | acccaacatt | 180 |
| atatttatcg | atagagtaat | taccctgata | ccacctgaaa | tttttttcaa | atttcacata | 240 |
| atat | | | | | | 244 |
| <210> <211> <212> <213> | 5691 259 DNA Glycine max | ζ | | | | |
| <400> | 5691 | | | | | |
| agcttctcct | ttcttttcta | taaatagagg | aaggagggaa | gaacaaaaat | gttcaaccct | 60 |
| cctggtatct | gagattcact | gaaaattagt | tagaaaaatt | gtttccatga | agaaaatcca | 120 |
| agccgaggcg | cttccgtgac | gttttcgtgg | gcgattttgc | gaagattttc | aaccattctt | 180 |
| cgtcgttctt | tgttcgttct | tcgacgttct | tcgggcttca | tcccggaagc | tcccataatt | 240 |
| gaatctttca | tttcattct | | | | | 259 |
| <210> <211> <212> <213> | 5692 332 DNA Glycine max | × | | | | |
| <400> | 5692 | | | | | |
| agcttgtggt | tgttgtgtta | gtattctatc | cttggtttag | atttcacaaa | gtctcttaag | 60 |
| tcttcatttt | gatgttgcac | accaaatctt | ctcaaggaca | ttctcagctt | tccacttgtc | 120 |
| atctctgtgt | gtggcagcat | atggaaagtg | agatgctatc | aacatcagtc | ttctaatgtg | 180 |

| tcctctgtat | gtgtggcagc | atatgaaaga | catgatattg | tctttgaggt | atagtagaga | 240 |
|----------------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| acaattatga | acttcagtgt | ttaaagtcaa | aatcttcatc | attttgatgc | agactctgat | 300 |
| gaaacttcat | tctgaccctg | tatgcgcatt | gt | | | 332 |
| <210> <211> <212> <213> | 5693 452 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5693 | ıll n locati | Lons | | | |
| agcttatgcg | catatttcct | tacaaacgtt | ctcttgcaca | agacattcta | ttaaccaaaa | 60 |
| aaaaaaatgc | acccatatac | aatcaaggca | gcttcgttac | ctagattatt | tacacgtact | 120 |
| tccaaggtgt | atttgttact | tacatcacac | acctccttgg | ctaaattcac | atacatgcat | 180 |
| actcaaagca | ttttggggta | ccaaaaattg | cacatgtgca | catcttggta | tttctaatac | 240 |
| ctatacatac | acaaacttca | tgatgaatct | tgactatcta | cacaataagg | tgctacattt | 300 |
| tatgctcttt | tcaagttttt | gctacctaaa | gccgcatgca | aattcaagta | tattttcctt | 360 |
| tgctgactaa | aatngtattc | aaattaaaag | gtatacatnt | tttggtaatg | tatcttcttt | 420 |
| acataacatg | caacatattt | atngtatatt | tt | | | 452 |
| <210><211><212><212><213> | 5694 441 DNA Glycine max | × | | | | |
| <400> | 5694 | | | | | |
| agcttgaggt | tgatgttgct | tgcggacatg | ttcttgatgg | tttttattca | accacttctg | 60 |
| cttacaaaag | gctaacaaaa | tctattcctt | agtgtggcca | ttccacctcc | caaaaaatat | 120 |
| taaacactto | atttggattg | ttgttctgtt | tcagatggaa | aaacagtatt | tgggaaaacc | 180 |
| ccgctcccgc | tgtcaaattt | ctattctcgt | actggattaa | ccataaccct | aacgtttgag | 240 |
| tcatgcttct | ctactctgcc | ttaagctttt | cgattatggt | tgctcttcga | aagaagctac | 300 |
| catggctttg | ı attaacaatt | tcacagaata | atgtctgttg | tacgtgcttt | : ttattttcga | 360 |
| cgtcgtgaag | actgtgcttt | tttctgttgt | ggcttgaaag | gaaacatgga | a ccaatagaaa | 420 |
| taggcttttt | ttttcattat | a | | | | 441 |

| <210><211><212><213> | 5695 363 DNA Glycine max | |
|-------------------------|--|-----|
| <400> | 5695 | |
| agcttagagc | taattcaaac gacaataact ttttactcgg atgtttgatt gagccccgta | 60 |
| atacatcgag | acgctcaaaa ttgaatgttg aagctcgcag caaattcaaa cgacaataac | 120 |
| tctttactcg | gatggctgat tgagtcccgt aatatatcga gacgctcgaa attgaatgtt | 180 |
| gaagctctca | gccaattcaa acaacaataa ctttttactc ggatgtgtga ttaagtcccg | 240 |
| taatacattg | agacgctcaa aattgagatg ttgaagctct cagcgaattc aaacgacaat | 300 |
| aactcttttc | ctcagatgtc tgattgagac ccgtaatata ttcgagacga tcgaaattag | 360 |
| att | v | 363 |
| <210> <211> <212> <213> | 5696 403 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5696 | |
| agcttatcac | tacttgaaga acataatata tttatgaagg taatatgcta cagaacaaaa | 60 |
| acaagacaac | acttaagtta atgaacttat catttcctct cttgggttag tcttcttcgg | 120 |
| catatattaa | ntatgtttat tgcattatag ttcgcatcct gtgtaacttg taaccaacaa | 180 |
| tatgccagaa | tgaaccataa ctcataagga atcaaaagat ataaagcatt agcttgattc | 240 |
| atttattact | ttggcctaag ctgttatggt gtataactac aaaacaaaga tgaaattatg | 300 |
| taattgaaaa | tgacacaaat gtaaaacatg acctcctata aagctcacaa gatttgttaa | 360 |
| tataagcata | cacagtining atgitgacat attocatgaa ctg | 403 |
| <210> <211> <212> <213> | 5697 440 DNA Glycine max 5697 | |
| | | |



| aggatgaggt | gacaaggcaa | ttccagcaag | tgttttcaga | atcaaagttc | acacgacctt | 240 |
|----------------|-----------------|--------------|---------------|-------------|------------|-----|
| gtttaccagg | tgttgagttt | aaacaaatta | gccaggtaga | tagctctttt | cttattactc | 300 |
| cttctttgga | gctggagatc | aaggcagcgg | tttggagttg | tgatggtgat | acaagtcttg | 360 |
| gccctgatgg | gttcaatttt | caattctcac | ggcgtgttgt | gaattttaag | gcccaagatt | 420 |
| tgttgtatgg | tgcatg | | | | | 436 |
| | | | | | | |
| <210> | 5700 | | | | | |
| | 321 | | | | | |
| <212> <213> | DNA Glycine max | • | | | | |
| <213> | Grycine maz | ^ | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 5700 | | | | | |
| 20055522 | aaaaattaat | gtaaaattga | tcaataaata | aataagttgg | tgtaattctg | 60 |
| agetttataa | adadattggt | gcaaaaccca | ccaacaaca | aacaagccgg | 030000000 | |
| tttataatga | acaagttgag | gattaaaatt | aactaaaaaa | ataattattt | tagcctgcta | 120 |
| | | L L L L | +++ ++ | + | 2121414222 | 180 |
| catcaactta | atggataaaa | tttgtaagtt | lllladdadl | layaaalaaa | atatgtcaaa | 100 |
| ctaatttgtt | gaggataaaa | ttcctctaga | aatatatcga | agggagaaag | gacaatcatt | 240 |
| | | | | | | 200 |
| ttaacattcc | atgtcaactt | aaaattgaan | caaaataaaa | aggcgaatgt | aaaaatgaaa | 300 |
| ttaagttttt | ttaaaaataa | С | | | | 321 |
| - | | | | | | |
| 0.4.0 | 5801 | | | | | |
| <210> <211> | 5701 229 | | | | | |
| <211> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| | | | | | | |
| <400> | 5701 | | | | | |
| agettataat | atatogatao | gctcgaaatt | aaacat.cgga | gactctcgga | aaattcaaat | 60 |
| agcttataat | atategatae | geeegaaaee | aaacaccgga | 50000005550 | • | |
| agtcataact | attcacacgg | atgtccgatt | catgcttata | atatatcgat | acgctcgaaa | 120 |
| | | | ataataataa | cttttcacac | ggagatccga | 180 |
| ttaaacatcg | gaaactctcg | CyddallCad | acygicataa | ceecacac | ggagatccga | 100 |
| ttcgccacat | aatatgtcga | gaagctcgat | attgaacaac | gaaagctct | | 229 |
| · | | | | | | |
| <210> | 5702 | | | | | |
| <210> <211> | 324 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | × | | | | |
| | | | | | | |

| <223> <400> | unsure at a | all n locati | ions | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agctttgatg | tttgtgttga | atgcattata | tgtaaataga | ccaaaagtaa | gaaattaggt | 60 |
| gcatatagag | ctacagacat | cttggaattg | atacatacgg | acatttgtgg | gccatttcat | 120 |
| gcaccttcac | gaaatggtca | acaatattnt | atatcattca | tagacgatta | ctccatatat | 180 |
| gcatacttgt | ttcttataca | tganatgtca | cagtctctgg | atgtgttcaa | aaaatttaaa | 240 |
| agtgaagttg | ataatcaact | caacaaaaaa | atcaagagtg | tcagatctaa | ctatggtggt | 300 |
| gaatactaag | gcaaatataa | cggt | | | | 324 |
| <210> <211> <212> <213> | 5703 208 DNA Glycine ma: | × | | | | |
| <400> | 5703 | | | | | |
| | | atataaccac | atcctgagat | atacttagga | gagtttttgg | 60 |
| cgagaggaga | cacgttcttc | gacaggagac | atgttctggg | gttttagaga | ttccagtttt | 120 |
| tactgtggat | gcgcattgct | cacgtagaat | gaagtccatg | tcatgcaagg | ttgtttccgc | 180 |
| ttcaatctac | tatatcattt | cctactga | | | | 208 |
| <210> <211> <212> <213> | 5704 511 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5704 | all n locat | ions | | | |
| gacgcgtatg | aatcatgcta | ttacggacct | atgaatctca | agcttatagt | gctcgtcctg | 60 |
| cacacgaang | tcataggtac | gcgataagta | tagatgacct | cccactctcg | taggatatga | 120 |
| tgccattatg | ctttctacga | taacacctgg | cataaaaggc | gagtggagga | acgcccctgc | 180 |
| atttacgcat | cttagcatat | gtgtataatc | gtttacggac | tttaatatta | ctctataata | 240 |
| aggccctaca | gctttaaatg | gatgcatctt | cgttcacgct | tcattgttta | ccgcatctta | 300 |
| cctgaagaat | cttggaccta | tattactctg | atcctggtgt | gtancctatc | tgatatgctt | 360 |
| acatgtatac | ttcttttct | aaaaagttga | tccgttgacc | acctcgctct | atgactatta | 420 |

| cctgtgcccg | tctatagact | actctgcaat | gtatcatccg | gggataatag | atgctgtgtg | 480 |
|---|---|---|---|--|--|---|
| gactttctgt | aaatagacga | ccgtcgccat | g | | | 511 |
| <210> <211> <212> <213> | 5705 267 DNA Glycine max | ς. | | | | |
| <400> | 5705 | | | | | |
| tgcagagagt | ctgtgatagg | ctcgcgaaag | tgtgaaccac | atcagatcag | aacgtgaacg | 60 |
| agaaccttct | ttgctttgct | ttttttctc | tatctctctc | tttctttctg | tgtgtctttc | 120 |
| ttacaccaaa | gattatcttc | tttattttat | ccaaacctga | tcatctaaga | tgcatgaggc | 180 |
| agcaaatcat | taatctttaa | ttaatttatt | tattaggtgc | tttggatttt | ctttcttttg | 240 |
| tgtgctttca | gcactaccaa | tgatgat | | | | 267 |
| <210> <211> <212> <213> | 5706 551 DNA Glycine max | ĸ | | | | |
| 000 | | -11 1 | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| <400> | | | | aagaccttat | gcttggtgca | 60 |
| <400> gcattgaaat | 5706 | cgatctacgt | gacactatat | | • | 60 120 |
| <400> gcattgaaat agcttatcgt | .5706 | cgatctacgt aacaactcca | gacactatat tcgtctaagg | tatactatgt | gactaactac | |
| <400> gcattgaaat agcttatcgt gtgaggcata | .5706 cgtgcccctg ctatatcata | cgatctacgt aacaactcca acggcgatga | gacactatat tcgtctaagg ctacgcttct | tatactatgt | gactaactac | 120 |
| <400> gcattgaaat agcttatcgt gtgaggcata ctatttgtag | 5706 cgtgccctg ctatatcata cctnctgtgc | cgatctacgt aacaactcca acggcgatga ctcgtggtcc | gacactatat tcgtctaagg ctacgcttct gctcacactc | tatactatgt cactgaacct tgcgtacaat | gactaactac ctcgttatct aaatatcgtc | 120 180 |
| <400> gcattgaaat agcttatcgt gtgaggcata ctatttgtag ctcatagttg | cgtgcccctg ctatatcata cctnctgtgc tactactggt | cgatctacgt aacaactcca acggcgatga ctcgtggtcc gaatcatccg | gacactatat tcgtctaagg ctacgcttct gctcacactc acaaagctac | tatactatgt cactgaacct tgcgtacaat tgctgctaaa | gactaactac ctcgttatct aaatatcgtc gggtttcgat | 120 180 240 |
| <400> gcattgaaat agcttatcgt gtgaggcata ctatttgtag ctcatagttg tcagatgagc | cgtgccctg ctatatcata cctnctgtgc tactactggt ccttaaattt | cgatctacgt aacaactcca acggcgatga ctcgtggtcc gaatcatccg cggattattt | gacactatat tcgtctaagg ctacgcttct gctcacactc acaaagctac cgtgaagtgc | tatactatgt cactgaacct tgcgtacaat tgctgctaaa attaccaaga | gactaactac ctcgttatct aaatatcgtc gggtttcgat taataccttc | 120 180 240 300 |
| <400> gcattgaaat agcttatcgt gtgaggcata ctatttgtag ctcatagttg tcagatgagc | cgtgcccctg ctatatcata cctnctgtgc tactactggt ccttaaattt tactataacc | cgatctacgt aacaactcca acggcgatga ctcgtggtcc gaatcatccg cggattattt tgaactgcga | gacactatat tcgtctaagg ctacgcttct gctcacactc acaaagctac cgtgaagtgc tccagtattg | tatactatgt cactgaacct tgcgtacaat tgctgctaaa attaccaaga gttcctgcag | gactaactac ctcgttatct aaatatcgtc gggtttcgat taataccttc atgaatagtg | 120 180 240 300 360 |
| <400> gcattgaaat agcttatcgt gtgaggcata ctatttgtag ctcatagttg tcagatgagc tgctccttac actggctttt | cgtgccctg ctatatcata cctnctgtgc tactactggt ccttaaattt tactataacc ttatacgacg | cgatctacgt aacaactcca acggcgatga ctcgtggtcc gaatcatccg cggattattt tgaactgcga gactagaggt | gacactatat tcgtctaagg ctacgcttct gctcacactc acaaagctac cgtgaagtgc tccagtattg gaatgtgatg | tatactatgt cactgaacct tgcgtacaat tgctgctaaa attaccaaga gttcctgcag actgacaaag | gactaactac ctcgttatct aaatatcgtc gggtttcgat taataccttc atgaatagtg aatatcttac | 120 180 240 300 360 420 |
| <400> gcattgaaat agcttatcgt gtgaggcata ctatttgtag ctcatagttg tcagatgagc tgctccttac actggctttt | cgtgccctg ctatatcata cctnctgtgc tactactggt ccttaaattt tactataacc ttatacgacg tactatcgct ctatctacag | cgatctacgt aacaactcca acggcgatga ctcgtggtcc gaatcatccg cggattattt tgaactgcga gactagaggt | gacactatat tcgtctaagg ctacgcttct gctcacactc acaaagctac cgtgaagtgc tccagtattg gaatgtgatg | tatactatgt cactgaacct tgcgtacaat tgctgctaaa attaccaaga gttcctgcag actgacaaag | gactaactac ctcgttatct aaatatcgtc gggtttcgat taataccttc atgaatagtg aatatcttac | 120 180 240 300 360 420 480 |

| - - | DNA Glycine max | |
|----------------------------------|---|-----|
| <400> | 5707 | |
| tatgcactct | tatgtactgg aactagtgag tatattette gacatgtatt attttagate | 60 |
| ataagaacca | tgttgtgaag ctgctcagtc ggggtatttt ggcaatactc ttgttcaatg | 120 |
| ccaaatatgg | ctattgacca ctatgacatc caataagaga gtgaccaatt agatagagga | 180 |
| gaaggatagg | gcgaggggaa ttatgtggga caataaaatg ccaatctaca aatagcttat | 240 |
| tgatagtgat | gaacaagact g | 261 |
| <211> <212> <213> <223> | 5708 597 DNA Glycine max unsure at all n locations 5708 | |
| caatatcact | acactgtgct cctacttaac tctaatatta ganttacatt ntaactatat | 60 |
| cttatcacaa | catgcagnet ttgaaatega gtteetaeca gteaetatan acaaettaag | 120 |
| ctacactaac | tatatatgcc acgtctaatc tacgatacca ttgtactgaa gttgtctgac | 180 |
| cacaatcgat | tcaaacattg ttgtggncca agtataatgt atatcgacac ctctagctct | 240 |
| ccttcttgca | tcttactcat gctgccccaa atggtattgc tgcatcaccc atatgtttaa | 300 |
| tgtcaagaat | gtatacccag tgctctgtac caaataacgc gaattgatca ttatgatcag | 360 |
| atattacatg | gaatcgatga aacatcttcg atgctttcat tgagtcccat atctctgagc | 420 |
| gaatgcataa | gacattgaac tatcgaatta tacgacccat gaagacactt atttacttgt | 480 |
| aacccacaaa | agtgtgcgct tgaacatgtt accaatctga acgagacaac gttttactct | 540 |
| cagtcgtatt | ggtccttgca ctaacatacg ctggagatta gaacaatatc tcttacn | 597 |
| <210> <211> <212> <213> | 5709 197 DNA Glycine max | |
| <400> | 5709 | (0 |
| tgaatcatga | gccgttctga gagcttacga cgatattgtg agtgattgtt atatcctata | 60 |

| cgtgcaagag | acatcctcac | cacttgcata | ttttcaatct | tacaccatgt | tcttctatct | 120 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gttgtaaaga | ccgctaccta | ttaatctaaa | gctaaatcct | ctgtcggtac | ttccctatag | 180 |
| gcacctgctg | caaagat | | | | | 197 |
| <210> <211> <212> <213> | 5710 335 DNA Glycine max | κ | | | · | |
| <400> | 5710 | | | | | |
| agcttgagga | gggcgtcatc | cacactcctc | ttccttccat | ctaaggggtg | attatatttt | 60 |
| gcctcattgc | ggatgataga | cgtctccatt | aagcgcgtga | tattaatcat | agacatatat | 120 |
| gcgactaaca | tatcccatgc | tagatacaag | atcactttct | catagataac | tcatttcaaa | 180 |
| caacattgcc | agctactacg | gtaagaaatg | accaccacaa | atgctcattt | acatatgcag | 240 |
| ttctatataa | catgaacgcg | gtcggccttg | tcttaaaata | taaatatttt | tctttcccaa | 300 |
| tttattttct | ctctttacct | acatcctttt | ttccc | | | 335 |
| <210> <211> <212> <213> | 5711 92 DNA Glycine ma: | x | | | | |
| gggcacgagg | tggaagcact | acctatcaac | tctttttgca | tataggattc | tactgatatc | 60 |
| actgccaaat | atcgttatct | tgaataagat | tg | | | 92 |
| <210> <211> <212> <213> | 5712 424 DNA Glycine ma | x | | | | |
| <400> | 5712 | | | | | |
| _ | | | | aaagcgacta | | 60 |
| ccaaatttat | | | | | | 120 |
| | agttttactt | gtcctcaagc | aaagaaagaa | caactcactt | gcccttaagt | 120 |
| gataaagaca | • | | | tcatcaagga | | 180 |

| aagataagag | cacaagtatt | agagtcacag | ctgaaataag | ctagtaagca | tgacgaacat | 300 |
|----------------------------------|----------------------------------|-------------------|------------|------------|------------|-----|
| caaggaagga | tcatcaacca | aaacctcaca | gtcattgttt | cactcaaact | caagtgttta | 360 |
| ggcttattcc | ttcataaaca | accaacacaa | gttccaacct | ttgcatttca | tctcctatca | 420 |
| taca | | | | | | 424 |
| <210> <211> <212> <213> | | « all n locat: | ions | | | |
| <400> | 5713 | | | | | 60 |
| | | | | tttgacgttc | | |
| gtatctgagg | atcacttgaa | attagtgaaa | aaaaatcgtt | tccgtgaaga | aaatccaagc | 120 |
| cgaggcgctt | ccgtaacgcg | tctgaaacgt | ttccgtgggt | gattccgtga | agattttccg | 180 |
| ccatctatcg | ttcgttcttc | atcgttcttc | gtcgtcctgc | ggtcttcaac | cgataagttc | 240 |
| ccgaaatcga | acttttcaat | tcattctatg | tacccttggt | ggttcccact | tgtttcgcgt | 300 |
| acttttattt | tcatttcatt | tactntctgt | atcccctttt | gacgtgcttt | agtcatttat | 360 |
| ttaagtcatt | gtctcgccta | atcacaaaat | ataataaatc | tccaccgatc | atttaaattg | 420 |
| taacatttgt | taatttctgt | taaaatgaaa | tccgaccgtt | cggtca | | 466 |
| <210> <211> <212> <213> | 5714 447 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5714 | all n locat | ions | | | |
| agctttcaac | tgaacttaca | atgttccaat | tgatttcaaa | atgttgtaat | tgattacaat | 60 |
| gttttggtaa | tcgattacca | gtgtgtttga | acgttgaaat | tcaaattcaa | atgtgaagag | 120 |
| tcacatcctt | tcacgaaaat | gctntgtgta | atcgattaca | ctgatttggt | aatcgattac | 180 |
| cagtgatagt | ttctgagcaa | atcaaaagat | gtaactcttc | aaatagtttt | tgactctttc | 240 |
| aaattggttt | aagtttttct | aaaggtcata | actcttctaa | tggttctctt | gaccagacat | 300 |
| gaagagteta | taaaaggaag | actttattt | gcattntata | aacatctttc | caatcattct | 360 |

| ttagacaaca | aacttttgcc | aattgctttc | tgagtctctt | tgaacttctt | cttcttcttc | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|------|
| ctttgtgaaa | agctntctaa | agttgat | | | | 447 |
| <210> <211> <212> <213> | 5715 418 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | Lons | | | |
| ngatcaaaac | aattatctaa | tcattccaat | ccactcaaat | catacaattg | cttattcaaa | 60 |
| tcatactcaa | acactcattt | catgcaaaat | aatccactgc | atatcatttt | caatcaattc | 120 |
| actgttcaaa | cacacttttg | gtacaagaaa | acaactcaaa | gtgctaaaat | ttaaataact | 180 |
| gaaatataaa | gcaaactaaa | aagcaactaa | atcctgataa | actaaaatga | tcatgctttt | 240 |
| cacaaattaa | actaaacaca | atttaaacat | cctgctcata | ctatggctga | tgttcattaa | 300 |
| gatccagtgc | tggaactgct | gatgaatcct | ggataggctg | ctttggctgc | gtgactggtg | 360 |
| cacatggatg | ggtctcctca | cggatatgta | cacgagatgg | ctcatggatc | tggtttat | 418 |
| <210> <211> <212> <213> | 5716 365 DNA Glycine mas | x | | | | |
| <400> | 5716 | | | | | |
| | | | | | tatcctataa | . 60 |
| | | | | | gagacacaac | 120 |
| tcaaagatca | acttctctcc | ctttttcttt | cttcaattta | gtgctcccc | ctttcatctt | 180 |
| ctctcccttg | ttcttttcct | ccattgaagc | atcctttcca | agcttcttat | ccacggctca | 240 |
| tcttggtggt | gaagctcctt | cttccatggc | ttattcccta | atggatggcg | tctctctcac | 300 |
| ctcttctact | gtggcttctg | ctacatctcc | atggcggaaa | atcaccatta | aaggacctca | 360 |
| ttgaa | | | | | | 365 |
| <210> <211> <212> <213> | 5717 589 DNA Glycine ma | x | | | | |

| <223> <400> | unsure at a 5717 | ll n locati | lons | | | |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| cgcatactgc | ctgtgcgtnt | ntcacnctat | ntgatanact | cgttntcact | tttanaanta | 60 |
| aannnctaac | ccactaacaa | acagatggan | nttganattg | atgtcattag | ctgacactat | 120 |
| acaatactca | agactggcta | atcaacctga | cgttgataca | tacagaaatc | aactctctaa | 180 |
| tttgatgtac | caccgataca | tcacccatgc | tgtaatggaa | aatacttatt | cactgacaca | 240 |
| acaacgctaa | gtctggaaga | agttgaaacg | acgtactcaa | gttatataca | cacaagcgca | 300 |
| gccgcatacc | tcgactaaca | agtggaagaa | tgcgttgaaa | aatatccata | tcctatcctt | 360 |
| ccacaacaat | gtctttaatg | gtatgaccac | ttcttctggt | caacatatcc | ttccaaagcc | 420 |
| cgttagagag | catttgccga | atgcttctca | atagaaatgg | tatctacagt | tctcgagaac | 480 |
| ccagagacaa | ccgaaagaat | tctttaattt | catgaggtca | caacgatatg | ttccccctgg | 540 |
| ctttgagtga | gaaaccctct | cttcttgtta | tgtacacccc | gcgaccgcg | | 589 |
| <210> <211> <212> <213> | 5718 417 DNA Glycine max | · · | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| tagcttcacc | ataaaaaatg | gtgtcatccg | ctttctgttc | gatgctgatc | ggcacataat | 60 |
| tagcaccaac | cagatagcct | ttgaatagat | tattctcctc | agccctgctc | ataacccaat | 120 |
| caaaccttct | gcgagagata | aacaagaggc | gactaaggat | ccccttggcg | aatgcccttt | 180 |
| tgagggataa | aatcagaatt | cggacttcat | tcccaaaaca | gaaatagagg | cggatatgac | 240 |
| acateettte | atccacttaa | cccagtgcgg | actataacct | gttctcccca | gcatataaaa | 300 |
| canaatagct | ccagataccg | aatcatatgc | cttttcaaag | tcaaccttga | acactangca | 360 |
| tgatcgattg | cttctcttat | cggcatcaat | aaccctattt | gctatgacta | cactatg | 417 |
| | | | | | | |

| agggccctct | aggcctaagt | catgttatgg | catttattct | aatactcgca | agctgtccgc | 60 |
|-------------------------|-----------------------------------|------------------|------------|--------------|------------|-----|
| attcaacaaa | tggtcatcat | acatacacag | actgctatct | agaatccatt | tatacaaact | 120 |
| taagcacaaa | taccattgag | gcattacacc | gagcacttgg | tggacgcact | attgggtacc | 180 |
| aacaacacag | gaatggggga | aaagtggctt | gccccatcat | cttagaacac | gatctatgcc | 240 |
| taaagccatt | ccctcacacc | cctcatatta | tagaaacaaa | gcataaattt | gccccaaatt | 300 |
| gtctcacg | | | | | | 308 |
| <210> <211> <212> <213> | 5720 275 DNA Glycine mas | × | | | | |
| <223> <400> | unsure at a 5720 | all n locat: | ions | | | |
| agctntagcc | ttaggttgtt | caccatgttg | ctccccctat | ctctaacaat | ctcccctttt | 60 |
| ttggctttga | tgatgccaaa | catgaattca | acattgagtg | catttgaaga | gtcttgagat | 120 |
| tggattggag | aacttgatca | cttagtctta | tcctcaaaaa | gtcttaacac | ttaggaagaa | 180 |
| gataattcat | catcattatc | atatatgcca | atatatatat | atatatatat | atcaattcat | 240 |
| catcatgtat | atcaatcaag | aattcagtca | atatc | | | 275 |
| <210> <211> <212> <213> | 5721 444 DNA Glycine ma | x all n locat | ions | | | |
| <400> | 5721 | | | | | |
| tctcaggagg | tgaacttagt | tatgagaggg | gtgtgtgtag | ctaagctcta | gcttcttaag | 60 |
| gaagttttct | caagaaagct | tctcaaggaa | gctacctagt | ctataaatag | aagcatgtgt | 120 |
| aacacttgtt | gtaactttga | tgaatgagag | tcttgtgaga | cacaactcaa | agttcaactt | 180 |
| | | | • | | ccctttttct | 240 |
| tttcctccat | tgaagcatco | tctccaagct | tcttatccaa | . ggctcatctt | ggtggtgaag | 300 |
| ctccttcttc | catggcttat | tccctagtgg | atggcgtctc | ctctcacctc | ttctcctttg | 360 |
| tcttctgcta | catctccatg | gtggaaaatc | accattaaag | gacctcantt | gagctcanag | 420 |

| atccagcctc | catagaagcc | ccac | | | | 444 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5722 362 DNA Glycine max | ς | | | | |
| <400> | 5722 | | | | | |
| acctgccgca | tgcaagctag | atttgcgagt | tgatgttagt | cttactttca | ctttggttat | 60 |
| tactcatttc | attcaaggaa | acctccaaag | aataacgtca | gattgattct | ttttgattat | 120 |
| tttattcaaa | gatattttga | ttattttatt | attatttcgc | tttttttggt | ttaaccgagg | 180 |
| ttacaatgta | aatgatcggt | tagattttgc | tttaacagtg | attaaacgag | attacaacgc | 240 |
| acatgatcga | ttgacattca | ttttatcatt | tattacgcga | gataacggct | tatacgatcg | 300 |
| gctaaagctt | ggtaaaaacg | gaagaagata | taaccgaaca | tgaacgagat | gaagaccaaa | 360 |
| gc | | | | | | 362 |
| <210> <211> <212> <213> | 5723 521 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 5723 | all n locat | ions | | | |
| tttccattta | tcattttcac | agtagttaat | caacnacaaa | gtggttgaat | cgatctcatc | 60 |
| cgaacataaa | ctaacttagg | tggcccgtgg | caaattaaag | ggaactgttt | attcttaatc | 120 |
| gaggaaaggc | cgtatcgcac | ttcagaataa | cggtaattca | tactatacaa | tcggatcgcc | 180 |
| atttatagag | ccatgatacg | ccatatttag | gcatgtatgc | tcgatgaccg | cttaatcgag | 240 |
| taattgttgt | acaaccattg | tgtaagacaa | caataggatg | ggggcaaaga | ggctcgatgc | 300 |
| aacgactgat | aacagaatct | aagtatatat | gaagatcctg | ccacctctct | attaaagaag | 360 |
| catacactaa | ı tttgtctcaa | attgctgcgg | gagtggccag | tcatagacca | tcatagataa | 420 |
| aagctcatgg | gaattataaa | ccaacggata | gcgttactgt | tggagtgaca | aaaactaaaa | 480 |
| gggatcttat | : agaatatggg | ggctagggca | aatatcaaaa | C | | 521 |
| | | | | | | |

5724

<210>

64

<210>

5726

| <211> <212> <213> | 472 DNA Glycine max | |
|-------------------------|--|------------|
| <223> <400> | unsure at all n locations 5724 | |
| agacatctga | ggcatgcaag cgttgccaaa atagcttaca tcagctctga aaaatcattt | 60 |
| nttgaagagg | ataagtcata agtgactggc taatcagctt cacagatata catgtatata | 120 |
| taacaagtag | taacaatgtg ctttacctgg actttatata atgaaacaac ttccacaaca | 180 |
| acaccaatgg | acaaaccaag ttcaactaca acaaactaat tcagcttcac ctggagttga | 240 |
| tataatgagt | aatggcttta gaagaactca aagccaaacc aagttcaagt acaacaaatt | 300 |
| aattaatctt | tttctcaacc aaagtatgtc aaactacttg ttggatatta aaagtgttag | 360 |
| ttattcatgt | gacaggcaaa gagagttgtt agacaataat tettgtttaa aaetgteaat | 420 |
| gaagtattgc | ggcattaatt tgatacacac tgatcaataa caatcgatac at | 472 |
| <223> | 5725 572 DNA Glycine max unsure at all n locations | |
| <400> | 5725 | 60 |
| | gttcntccna cctntaatct aatcgtaata actntacttc gaacanatnc | |
| | gagatgaatt gatgaccttc agacaccggc actatnaaca tgaagctgat | 120 |
| | atggagacaa tcaagtgtat gatgtgattt cacaccatca tgcggcacag | 180 |
| acacggcatg | cacatctgaa ttcgatcgtc ttggccttga cgagctgaat aggcgagaaa | 240 |
| gtccagcccg | cctcaagatc atagataatg ggtgtgatgt taccttatat catgatacga | 300 |
| gcgctgacag | actgaaagat gggaggccga cttttgttgt gactacttaa acttcctaga | 360 |
| gaaaagcact | gatcaattgc atagtacgtg gaaagaaagt agaatctctt ccatcgaacc | 420 |
| atcacatgag | tgatcgcatc ccaagcaata acacccatat agggaacgga actccaaact | 480 |
| | | |
| ttagtcacat | cctctcgggc atgactcatg gacggaaaac agtttcagtg cacagttgga | 540 |
| | | 540 572 |

| <211> <212> <213> | 537 DNA Glycine max | |
|----------------------------------|---|-----|
| <400> | 5726 | |
| tactactgaa | tgtatcaatt attcattata tttatgattc tatacagcgg atgaatggtc | 60 |
| atccatccga | cttaattata acttaacttg aagagatgca ctgactaaag ggaggagtta | 120 |
| ccatccatgt | gtcatcgatt acacattgtc agaatagaat tccaatatgt aagactcgtg | 180 |
| tatatttcag | ctgtggtaac tgagacaact tcatggaatg ggatacatgc cttacacaac | 240 |
| ttatagataa | acttttatca gctgtttttg caagagattt ggcgcactgg caatctgatt | 300 |
| acatcctctg | ttaacagatc actcgatgga gaatcctctg cacacatatt ataccttgca | 360 |
| tatattggcg | gagactettg ttgttccacg tggaatteee teegtgaage etagacacte | 420 |
| tcttgaagac | gtttcttgta tgctacagga tcctcggcgg tgaattaaca cttaagacga | 480 |
| gctcgatgat | cttcgaataa acttcgtaca ctcatgacca cctcgcatgc tccatcg | 537 |
| <210> <211> <212> <213> | 5727 613 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5727 | |
| ncacttcgcc | atctgantgt acacantact ctatagattt ttaaantaaa tatataannt | 60 |
| cntctacaca | cgcgcgagag aatgagatcg atagcctngc naatacgtga cactatagaa | 120 |
| tacacacgct | agangatttg tatacgaata tcaacacact actgcttatc ttttatcaca | 180 |
| ctagggcagt | agattacaca aatgtaacac tctaatatcg ctaaatcgag tgacgctgaa | 240 |
| gtactttctn | tgtcttgtac gcggagggca tagactatct aactcaaaag tcaactcgac | 300 |
| tgtactgacg | aaccacatat tatgcaaacg tccatctaaa gccgttttat gatacagcta | 360 |
| aggccactga | taatactgcc acatcatctc aaagtccaat actggagaag caacccactc | 420 |
| gaaatacata | cgagctaata ttcagtcgcc aatccgtatg gcgcattcat ttgtaacacg | 480 |
| at at at t a a c | | 540 |
| Ciciciaac | actaaaaatc tttaaagctg gacaattgaa tgacaaggat ctcatctcag | 310 |
| | actaaaaatc tttaaagctg gacaattgaa tgacaaggat ctcatctcag acgaaacaca tgagccaatt gcataaagta taaaagctca tgaaacctgc | 600 |

| <210> <211> <212> <213> | 5728 350 DNA Glycine max | • |
|-------------------------|---|-----|
| <400> | 5728 | |
| tcacctgccg | catgcaagct tecettateg atattgccgt atgcaatact taacatcagt | 60 |
| ataaacaata | gatgtcagtg gatcttaggt attccacctt tccatcaagc attaatgcct | 120 |
| tttttggagc | acatgcatta atatctgatt aacatgtgtt catgctattt gtagaaaatt | 180 |
| gtatatcatt | gtacattgta tcaatatttt tctcaagatt ctctagatac ttttctcaag | 240 |
| acatcacgat | tgacaagtca caagtataca caatttataa ataaaatggt gaaaggcatc | 300 |
| ggaggaaacc | gaaaaagtta cctaatagat ggacatttta tacagtcttc | 350 |
| <210> <211> <212> <213> | 5729 460 DNA Glycine max | |
| <400> | 5729 tgctaagcga gagtgcgcac tgagctcgga ttacactctg agcgagctgt | 60 |
| | caactettet teaattettg cateaattgt cetetaaage acttgaatte | 120 |
| | gacttctgct aataaaaaat tgcaaagatg ataatttctt cgttatttca | 180 |
| ttcaaaacaa | tagtaaagtg aacaaattac aatcattatt agtcaaaatt gactatcaag | 240 |
| ttaactcaga | tttcgcagat atcaactcct ccaaattaaa acatttgctt gttctcatgc | 300 |
| aaaagacaag | ttctgagtgt gccaacacat gagataacta tgaatccatt aaaacatttg | 360 |
| tcttgatctt | gcgatggaag catgaacgaa tacacatgga gatgaaaaat gttatcacat | 420 |
| aaaacttcat | caatgcaaaa tacaacactt cattcctcac | 460 |
| <210> <211> <212> <213> | 5730 436 DNA Glycine max unsure at all n locations | |
| <400> | 5730 | |

| | | | • | | | |
|------------|--------------------|--------------|------------|------------|----------------------|-----|
| agctattgtt | gaataaatcg | actcccatat | tgatccgcac | taccaatgat | aataaaataa | 60 |
| tcaaatttaa | ttcttcaggg | tgacagcata | taatgaccaa | tagcaaacaa | tatacctgaa | 120 |
| ttcaacaaca | tgacccgcaa | tttcagagag | ctcaaaacac | tttgttttat | tggtttt <u>.</u> aaa | 180 |
| ctcttccaac | agagaagaag | caaaactttc | atcaatgttc | ccagtatctg | catgccaagg | 240 |
| tcccatgacc | ccggccaaat | tcctcattcc | agaagcaaaa | cgcatattca | gttcattgtg | 300 |
| ectaacagga | cttgcagatc | caactggnga | agtggataca | acagagtttg | ccattggact | 360 |
| tcctgggtaa | gacatcccga | caccatatgc | aggatttcca | taataaccat | gaggagtgga | 420 |
| gctgcctgat | taccac | | | | | 436 |
| | | | | | | |
| <210> | 5731 | | | | | |
| <211> | 438 | | | | | |
| | | | | | | |
| <212> | DNA | _ | | | | |
| <213> | Glycine max | x | | • | | |
| | | .11 1 | ! <u>~</u> | | | |
| <223> | - | all n locat: | lons | | | |
| <400> | 5731 | | | | | |
| | | | | | ananattata | 60 |
| ntgcacgaag | ttacttggta | aaactatggc | acatgttttc | gggtagaatt | gagacttgtg | 00 |
| | | | | atattagagt | 2002200003 | 120 |
| aatgtaatgc | aatttetgta | atgatattga | taaytayyyc | Clactagage | aggaaggeea | 120 |
| | +++ <i>~aaaaaa</i> | taccagtata | ttgagttatt | ttctctaacc | aacatgtatt | 180 |
| ctatageatg | tttgcccgag | taccagtata | cegagecace | cccccaacc | aacacgcacc | |
| atacatttta | ttaggatgga | cccaaagagg | tccaaaagaa | ggatgtttaa | gtggctcaaa | 240 |
| atycattity | ccaggacgga | cccaaagagg | cccaaaagaa | 990090000 | 3-33 | |
| gattataaaa | gataatgttt | tttatttata | aattatagtt | ctttatttaa | tttatattaa | 300 |
| gaccacaaa | gacaacgee | | • | | | |
| aataacatga | tattaaaact | tggataatta | ttatccattg | attaaatgtc | ccttagatta | 360 |
| | -55-5 | 30 | | | | |
| tatatgtata | ttcatcttta | cctattatca | tttattaatg | aaatatcaag | tttatcttat | 420 |
| _ | | | | | | |
| tctctgtata | gctgtatg | | | | | 438 |
| | | | | | | |
| | | | | | | |
| <210> | 5732 | | | | | |
| <211> | 457 | | | | | |
| <212> | DNA | | | | | |
| | | • | | | | |
| <213> | Glycine ma | ^ | | | | |
| <223> | ungure at | all n locat | ions | | | |
| | | all ii locat | | | | |
| <400> | 5732 | | | | | |
| | aattaaat | agttatasst | aacctatoto | tacttttcta | taagggtact | 60 |
| agettaetat | callygetea | ayıryıyadı | aacctatyty | cyclicita | caagggcact | Ų J |
| . | | +an++++an | agogtaggat | ctatttagac | acataacaat | 120 |
| taggattcaa | tgetttgtgt | Lyaltitgaa | ayectayeat | clacitayac | acataacaat | 120 |

| aatatgaata | caaattatta | agataattaa | tactataatt | tagatgacta | accttacctt | 180 |
|----------------------------------|----------------------------------|-------------------|------------|-------------|------------|-----|
| anattcgatg | cattggcgtt | tagcaacaaa | agctttccat | tgccccttgg | atatgaatgg | 240 |
| atacatttgt | ggaggatgct | catcaacact | accattttca | tcataaacat | tattctttgt | 300 |
| taagtaggtt | ctaaaatttc | tacaaagttt | atttgcttct | ttaagaaccc. | atctttgaca | 360 |
| gctattatca | acaatgaatg | ttgtctacaa | aattgatctt | aattgatcaa | gtatgtttgt | 420 |
| ataagaatca | tanaatatgt | caagtatgta | tagtacc | | | 457 |
| <210> <211> <212> <213> | | c all n locat: | ions | | | |
| <400> | 5733 | | | | tanttataga | 60 |
| | | | | gatcacaaac | | |
| aatcaaacaa | gacaaacaaa | taaaattctg | ttagtcatca | tataaacaag | ttaaataaaa | 120 |
| gagaaatttc | aaccaactta | attttaaaag | ataatggttt | tgatgttacc | ttttttcatg | 180 |
| attcaagtgc | ttagatcttt | aaagatggaa | gtcagacttt | tgtttttctt | acttaaactt | 240 |
| cttgagagat | gttctcatca | ctttcatagt | ccttggatag | aaggtcgatc | tccttcttcg | 300 |
| aaccatcaga | tgagtcattg | ccatcccaag | caatatacgc | cttcttggat | catctttctt | 360 |
| tataactttt | cttctcattc | ttctcgggcc | atgactcatt | tgacggacag | atcgtcttta | 420 |
| tgtgaccacg | ttgatacact | tata | | | | 444 |
| <210> <211> <212> <213> | 5734 417 DNA Glycine ma | | | | | |
| <223> <400> | unsure at 5734 | all n locat | ions | | | |
| agcttatgct | gcanatattt | acaatagacc | tcctcaacct | cagcagcaaa | atcaaccaca | 60 |
| gcagagcaat | tatgaccttt | ccagcaacag | atacaaccct | ggatggagga | atcaccctaa | 120 |
| cctcagatgg | tccagccctc | tgcaacaaca | acaaaagcct | gctccttcct | tccaaaatgc | 180 |
| tgctggccca | agcagaccat | acattcctcc | accaatccaa | caacagcaac | aaccccagaa | 240 |

| acagccaaca | gttgaggccc | ctccacaacc | ttccctcgaa | gaacttgtga | ggcaaatgac | 300 |
|----------------|---------------------|--------------|------------|------------|------------|-------|
| tatgcagaac | atgcagtttc | agcaagagac | cagagcctcc | attcagagct | taaccaatca | 360 |
| gatgggacaa | ttagctaccc | aattgaatca | acaacagtcc | cagaattctg | acaagct | 417 |
| 210 | 5535 | | | | | |
| <210> <211> | 5735 465 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <223> <400> | unsure at a 5735 | all n locati | lons | | | |
| ntannaattg | aattanaatg | ttctgtaact | attggtaatc | aattaccatc | catgtgtaat | 60 |
| cgattacaca | ttgtaagatt | tgaattcaaa | tttctaatga | ctgttgtaat | tattttcagc | 120 |
| tgcttgtaat | tgactacaat | cctcatgtaa | tagattacat | gccttcaaaa | atattcaaaa | 180 |
| tcatttttaa | aagcgtttta | ggaagtgttt | tggccactgg | taatcgatta | catcctctgg | 240 |
| taatcgatta | ctagagagta | aatctcttgt | aaaaatattt | tagcttaaat | tcattggcca | 300 |
| aacctcttgt | cgtttcaact | tggaattccc | ttcctaaatc | actagagatt | ttcttgatga | 360 |
| tgtatcttga | atttcttgga | ttcttgtctt | gaattaaact | taagaagtgc | atgatcctct | 420 |
| tgcattaaac | ttgagaagca | catgatcacg | tggcatcatc | aaaac | | 465 |
| | | | | | | |
| <210> | 5736 | | | | | |
| <211> <212> | 429 DNA | | | | | |
| <213> | Glycine max | x . | | | | |
| <223> | unsure at | all n locat: | ions | | | |
| <400> | 5736 | | | | | |
| agcttggttc | gaggtactta | cccgttgaag | atcgaagaac | gaatgaagaa | cgtcgaagaa | 60 |
| cggttgaaac | ctttgcgaaa | ttcttcacgg | aanacgttac | ggaaacattt | cggaagcgcc | 120 |
| tcggcttaga | ttttcttcac | ggaaacaatt | tttctaagca | aattcgaaag | agagagaagt | 180 |
| gcctaagggg | ctgaaccctt | ttccttctca | cttcctccc | tatttatagc | aaaatagggg | 240 |
| agatggttgc | cgcccagctc | ggccaggcga | gctcagctcg | cccaggtgag | ccaggttgct | 300 |
| tcctccagaa | gcaacagcct | tctggaggaa | tcttctggaa | ggcccaagtg | ggcttgggtg | 360 |
| ctatntgcac | ccccattttt | actaagtaca | cccctctgc | tttttttggt | gattcttttt | . 420 |
| | | | | | | |

| tcgaaagta | | | | | | 429 |
|-------------------------------------|--------------------------------------|-------------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5737 461 DNA Glycine max | τ | | | | |
| <223> <400> | unsure at a 5737 | ıll n locati | ons | | | |
| tgttgatttc | ttcaggatga | tcaacacaat | attgcatttg | ctgcttcaat | tttggcctgc | 60 |
| agatttcaca | aataatacat | ttactatgct | tatttggtag | gtttaaattt | tcatttttt | 120 |
| aagggaggta | taatttttta | ttaaaagtca | ttgtattttt | ttagaatttt | attttatgtg | 180 |
| aggtcaactt | aagttttta | ttttacacaa | atgtaattta | ttttattgcc | atattatcca | 240 |
| attcattaat | ttgatttagc | aacacactga | atttctataa | gtgttaatat | ttagcaacat | 300 |
| attctctagc | acatctttta | tatcacacat | tctattatag | attaaaattt | attacaaact | 360 |
| aaaaaattaa | cagagaaata | actcattaaa | taagaagtga | gactaacaaa | aattgtgatt | 420 |
| nntaataaat | tctaatcaat | ctttaataat | atatttaaat | g | | 461 |
| <210> <211> <212> <213> <223> <400> | 5738 380 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| agcttgccgc | cacggagttt | ttcgactatg | ctcttgtgtg | gnggaacaag | ctacaaaagg | 60 |
| agagagcaag | aaatgaagag | ccaatggttg | atacatggac | ggagatgana | aagatcatga | 120 |
| ggaagcggta | tgtgccggct | agttactcaa | gggacttgaa | attcaagctc | caaaaactaa | 180 |
| cccaaggcaa | caagggggtt | gaggagtatt | tcaaggaaat | ggatgtgctc | atgattcaag | 240 |
| caaatattga | agaagatgag | gaggtaacta | tggctcgatt | tcttaatggt | ttgactaatg | 300 |
| atatccgtga | tattgttgag | ctgcangagt | ttgttgaaat | ggatgatttg | cttcacaaag | 360 |
| çaatccaagt | ggagcaacaa | | | | | 380 |
| <210> <211> <212> | 5739 400 DNA | | | | | |

| <213> | Glycine max | c | | | | |
|-------------------------------|---|--------------|------------|------------|------------|------|
| <400> | 5739 | | | • | | |
| tgaatcggac | atccgtgtga | aaagttatga | ccatttgaat | ttctcaagag | cttccgtagt | 60 |
| tcaatttcga | gcttctcgac | atattatgcg | cccgaatcgg | acatacgtgt | gaaaagttat | 120. |
| gaccatttga | atatctcgag | agcttccgat | gatgaatttc | gagcgtatcg | atatattata | 180 |
| cgcctgaatc | ggacatccgt | gtgaaaagtt | atgaccattt | gaatgtctca | agagcttcca | 240 |
| ttgatcaatt | tctagactct | cgacatatta | tgcgcccgaa | tcggacattc | gtgtgaaaag | 300 |
| ttatgaccat | gtgaatttct | cgagagcttt | cgttgtgcat | tatgagcggt | tctatatttt | 360 |
| atacgccaca | atctgacatt | ccagtgaaaa | ggtattaaca | | | 400 |
| <210> <211> <212> <213> | 5740 409 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5740 | all n locat: | ions | | | |
| agcttatggt | aagatctgcg | acctacccat | ggtagaggtc | tccacagagg | ccattgtctg | 60 |
| cctcgcccaa | tattatgacc | agccggtgag | gtgcttcacc | ttaggggact | ttctattatc | 120 |
| acccacggng | gaagagtttg | aagaaatcct | gcgatgccct | ctgggaggaa | ggaaaccata | 180 |
| cctcttctcg | ggattctatc | cctctttagc | tagaatttcc | aagatagtcc | aaatctcaac | 240 |
| gcaggaatta | taccacagaa | acgaagtcga | atatggtgtg | gttggagtac | caaggaaatg | 300 |
| tttggaagta | aagcaagagt | cttggcaggt | aaaggcgaat | gggccccgtt | catggacatc | 360 |
| ctcgcactta | tgatctttgg | aggggtcctc | tcttcacatg | tggatgggt | | 409 |
| <210> <211> <212> <213> <400> | 5741 425 DNA Glycine ma: 5741 | × | | | | |
| tcgtcctcag | atccctctta | ttggacaaaa | cttaaccaga | accgcattaa | gacataacat | 60 |
| actagaaact | acgtttctgt | accccgatgt | ttcatgaaaa | cacgataagc | tagccctgtc | 120 |
| ctatcacgtt | ctaaggatca | aaccatttcc | caatggtgag | tgatcctaac | taagcatgca | 180 |

| gttacgtgat | caatgcaaag | gcacactaga | attaagtact | gatagcacag | tgaacacata | 240 |
|-------------------------------|----------------------------------|-------------------|------------|------------|------------|-----|
| aaacatcatt | agatagatat | aaaagtattt | acatcaaggt | ccccatacga | agaaccaatt | 300 |
| gaggatttag | ctctccatag | tcgggaagct | ttctttacca | cgatgagaag | agaagatgaa | 360 |
| cgattgaaga | agttcaaatt | gtggcgatgt | ctccttcacc | tctaaaacct | tacatctctc | 420 |
| aaatc | | | | | | 425 |
| <210> <211> <212> <213> <223> | | « all n locati | lons | | · | |
| <400> | 5742 | anagat agt g | tttaaggtat | atcasactat | atttatacot | 60 |
| | | | | atcaaactat | | 120 |
| | | | | cttacttatc | | |
| ttaataattt | gaaggcaaaa | aatagcgttg | acttggacaa | ctattgtgac | ataacgctgg | 180 |
| gagagcaaga | taagcatggt | gctagacgaa | tgatgaaatt | ggcattgcta | tgtgtggatg | 240 |
| tgactagtag | aagaccatca | atggcgcaga | ttgtgcaaga | gttggagcac | attcaaagag | 300 |
| aaattgctcc | agtgtattct | caattcaacg | aggagattgg | tgccgtgact | ctatggagtg | 360 |
| agc | | | | | | 363 |
| <210> <211> <212> <213> | 5743 435 DNA Glycine ma | x | | | | |
| <400> | 5743 | | | | | |
| tctgcttgtg | tgtgcatgga | tcatcaagtg | tggctctgta | taatatgcat | tctgcggact | 60 |
| cccaacatag | caccattact | gtgcataaag | gatacaaata | gaggttcatt | tgttggataa | 120 |
| ttgcaaccaa | tgctatatga | aatcatcgcc | taatacaaga | gccgtatcta | ccgcaatgag | 180 |
| aacgttgcgg | tcatactaat | tacaatatga | gacaacacta | tttgctttaa | tcaacgatta | 240 |
| tgaaaatgaa | tattttacta | accagagaac | ctctttttga | taaaaattaa | acccatgaac | 300 |
| ctaaacgcat | caataataca | gcactgttat | gtgatatgcc | tggatcactt | gcttcatatt | 360 |

| tactcaccat | gaattacttt | ctataatgaa | gactagagaa | gcattccatc | agcttcttat | 420 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| gctggactaa | aatat | | | | | 435 |
| <210> <211> <212> <213> | 5744 465 DNA Glycine max | κ | | | | |
| <400> | 5744 | | | | | |
| cacctgccgc | atgcatgctt | attgaaataa | agctagaaag | atcttataag | aaagtcacaa | 60 |
| accacttcta | taaacccatg | taagcacttc | taaatgccct | ccacatctga | gattattgca | 120 |
| gtgggattct | gttcttcaaa | aactctcttg | atcctatctc | cagatgtatt | agaatctcct | 180 |
| gcttgccttg | ctttataatg | tcaaattcac | acagctatta | atgaattagt | atctaaaatg | 240 |
| gtattatttt | ctgcacacat | gggcgttgaa | ttgcattgat | gtcacgcatg | taactttaaa | 300 |
| gggttttaat | gagagaacca | acgtcatctc | catttatagt | actctaattt | tgtagcagca | 360 |
| taagtgaatc | tttttgcatt | ggaattgaca | ctaccaatag | agaacttctt | catctttatg | 420 |
| aacactatac | atctttcatt | gtctcttatt | ctttaatgga | attaa | | 465 |
| <210> <211> <212> <213> | 5745 434 DNA Glycine mas | x | | | | |
| <223> <400> | unsure at a | all n locat | ions | • | | |
| ngggtgatgt | tgcgcgtact | gatgggtacc | atgaggtgtt | tgctggggtt | tgacccacgc | 60 |
| gggtgttgaa | gagacggcat | gggcatctcc | ttccttcctt | tttgcccctg | ttgccccaat | 120 |
| tctttcggca | ttcacgtttg | tggaggaaac | gtaatcaaac | tttcctctct | tcaatccaac | 180 |
| ctcgattctt | tccccggcaa | acaccagatc | cgtaaagctg | gacggcatgt | aacccactag | 240 |
| cttctcatag | tagaacactg | gcagagtgtc | taccatcatg | gtgatcatct | ctctctcaac | 300 |
| catgggagga | gctacttgtg | ccgccaaata | cctccatcgc | tgtgcatatt | ctttaaaggt | 360 |
| tacaccctct | atctcgaaca | tattctgtag | ttgagtacgg | tcatgagcca | tatcagaatc | 420 |
| gtactgatac | tatc | | | | | 434 |

| <210> <211> <212> <213> | 5746 335 DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 5746 | |
| gagcttgagc | taggatattg cgattagtga cgttgcggtg tacgactccc tccccggata | 60 |
| ggtgcagaat | tctttcaagc attgtgcgac tattttccca gaggctctnt gagaagatag | 120 |
| gaaagctaga | aactcccagg tctttattaa caaaactgtg ccacggtggc agatttctgc | 180 |
| cttggtggat | accatcaata gtgcactcaa gggcaagggg atgctttgtc ctccaggagt | 240 |
| ccgagattgg | tgcagagtat tctcccttct tccctgcggg aacggtttat gttgaaggta | 300 |
| gctgcttggg | tccacacgtt tgtcgggctt tggcg | 335 |
| <210> <211> <212> <213> | 5747 452 DNA Glycine max | |
| <400> | 5747 | |
| taggcttctc | ttttcaacct atatttgttg agtgggccaa ctcattgtga tctattcttt | 60 |
| acaagtagaa | agaatagcaa gccataactt attgagccat cctgtttgac atctctaatt | 120 |
| gtatcaatga | tottatotta caatatattg ttttottttt otattatact ttttatacta | 180 |
| caatataaaa | tttctcttaa agaatatagg gtaaactatg tttttaacca ctaaactttt | 240 |
| tcaaaatttg | atttttagta cataaataaa agtttttta tactagaaaa cttttttta | 300 |
| tattctgaag | cgtattttgt agaagtaaag atattttgat gttctgatga tgccaaagga | 360 |
| acgcgctttt | tgagttttat tcaagacaag aatctaagat atccaagaaa ttcaagaaat | 420 |
| atgatcaaga | taattcctag agtcttagga ag | 452 |
| <210> <211> <212> <213> | 5748 419 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5748 | |
| ttacagtcac | ctgcggcatg caagctagag atgaggaagt gtagaagggt gattcttcct | 60 |

| gctnttattc | gttgtctcac | aaagtggtac | ctggagatat | gtcgcggngg | tcaggagacc | 120 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| ttgnggacgt | caggtggggt | gctattgccc | aaaaccaagc | ttgaccaatc | ccgacccaac | 180 |
| ccgggcatag | tcagttagtg | agaacctgtg | atgtacctaa | acaggcgagc | tcctggcagt | 240 |
| caacagataa | aaggaacaaa | gaccacaaag | catggaggct | tgtgtggtgg | ctggccagct | 300 |
| gtgaatcttg | tgtgatatat | gggttatggc | ctctggtaat | cgattaccaa | gggtgggtaa | 360 |
| tcgattacaa | ggcttaaaaa | tgaagacaag | aggctaagat | ggtctttggt | aatcgatta | 419 |
| <210> <211> <212> <213> <223> <400> | 5749 471 DNA Glycine max unsure at a | k all n locati | ions | | | |
| ngaagtctgc | gtagttctgt | gaggacttca | ttcagaagag | aagtggaatc | acccctttgt | 60 |
| ggtggaggag | atggggtaag | ctcgtaagga | ataggcagag | gcaagtcttg | tttgtgaatc | 120 |
| cactgaccat | caacatcatt | tcggtaacca | aaagagctaa | ccacaccagc | cccaatagaa | 180 |
| aaatatctct | taaccttcac | atatggttca | tcgtccaaag | gaatattgaa | atgatgaaga | 240 |
| aaaagagtaa | caaggtgggg | ataaggtaga | ggtgcattgg | cccgtaatgc | cttatgcatc | 300 |
| cggtaccgaa | ctaaatgggc | ccagtcaatc | tgacaaccag | tttgaaaggc | ccacatcaga | 360 |
| atcaaatact | cctcagaggc | ttgagcatgg | tttgaagacc | ggtgaagcaa | aatacgaaca | 420 |
| atgatataat | gcatgatgcg | acaatcaaaa | gttaatgacc | cagcacgtaa | t | 471 |
| <210> <211> <212> <213> | 5750 575 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| aatcaccacg | tgaccgaacg | aagaatctct | nttccactct | acctacccac | aaagccnata | 60 |
| ggannnnnnn | atgaaccctt | tgagacccgt | gacaccagag | acgactgcag | cangcagcgt | 120 |
| cttcatattt | cgataagaaa | gggttgtatt | cgattatcct | tcatccttct | tcctataatc | 180 |

cgagactect teateettt atetteettg attetettt agaettetta ttetetttt 240

| gttcttgtca | aaggacgtgg | tacgataaaa | aactcgaacg | aaactactta | acaaaaaaa | 300 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| gaaccacaag | ttaaatcgca | ggaaattatc | acaatgatcc | ctgatatcta | acaatgccaa | 360 |
| aatcggccca | ataatataac | taaaaaacaa | catgatacac | tcatgatgtg | atataataaa | 420 |
| tgcgcactca | tactaagaaa | tcttgacatt | ttcacttaga | atattagctc | cataccctca | 480 |
| tctatacccg | catcctcacc | atcatggaca | actatgtatg | ggtggccaac | aatggcttat | 540 |
| cacaacatca | gcaaagatca | gagagatctt | tggcg | | | 575 |
| <210> <211> <212> <213> <223> <400> | 5751 458 DNA Glycine max unsure at a | « all n locat: | ions | | | |
| ngagaagttg | catcaacaag | ctgaccagat | aatgcataac | attatcaatg | agcatagaga | 60 |
| ggctaagtca | agtgccacag | gagaccaggg | agaggaggaa | gttcttttag | atgtgctctt | 120 |
| gaagaaggag | tttggcttaa | gtgatgaaag | tatcaaggct | gtgatctggg | taaggataga | 180 |
| cattttccac | caattttatt | gcatgataga | aaaatggaga | aaagtatgct | ttactgcctt | 240 |
| cacactttag | tttcaaaaac | tattttgtat | tttctaaaat | gattagtaat | cattttgtca | 300 |
| ttcaaaattt | aataggtttt | gcaaattgct | ttgaatataa | gtgtttaaaa | agaaaagaaa | 360 |
| aatataaaca | gttaaggaca | tattttctca | tcctctttct | gtaagtgctt | tattcaagta | 420 |
| tctagaaggc | aaacttttaa | aaattagaaa | tgtgatat | | | 458 |
| <210> <211> <212> <213> | 5752 354 DNA Glycine max | K | | | | |
| | | aagctctcga | tttaatcgag | tggtcataaa | ttttcacaca | 60 |
| | | | | attgaacaac | | 120 |
| | | | | atccggcgac | | 180 |
| | | | | | | 240 |
| gagacgcccg | aaattyaacd | accyaayete | Liyacadall | ataatggtcg | caaccccca | 240 |

| cgcgaatgtt | cgaattcggg | acataactca | tctagacgct | cgaaattgaa | caacggaagc | 300 |
|----------------|-------------|--------------|------------|------------|------------|-----|
| tctcgacaaa | tttgaatggt | cataatgttt | cacacggatg | tccgatctcg | gaac | 354 |
| -210- | E752 | | | | | |
| <210> <211> | 5753 220 | | | | | |
| <211> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| | | | | | | |
| <400> | 5753 | | | | | • |
| attcagagga | atacagtcta | tctcccttat | cttagtgaga | gagaggctcc | tacatacttg | 60 |
| agagatccac | gcacactctg | cctgtagcaa | aggactttca | caacctttga | gtgttgccct | 120 |
| cgctggaaag | agtgaccctt | tccttccaag | catctccacc | cttggtcttt | cataccacga | 180 |
| ttgcataaca | ttcaccactg | ccctagatta | tctcgtgaaa | | | 220 |
| 00904044 | | | | | | |
| 0.1.0 | 5754 | | | | | |
| <210> <211> | 5754 252 | | | | | |
| <211> | DNA | | | | | |
| <213> | Glycine max | ζ. | | | | |
| 12207 | | | | | | |
| <223> | | all n locati | ions | | | |
| <400> | 5754 | | | | | |
| agcttctcaa | ctaggtgggc | ttagttatta | taggggtgcg | tgtagctaag | ctctagcttc | 60 |
| | | | | | | 120 |
| tcaaagaagt | tttctcaaag | aagtttctcg | aggaagtttt | ctcaagaaag | cttctcaagg | 120 |
| aagctaccta | gtctataaat | agaagcatgt | gtaacacttt | ttgtaacttt | gatgaatgag | 180 |
| agtcttgtga | gacacaactc | anagttcaac | ttctctcctc | cttttcctcc | attcaaatag | 240 |
| | ~~ | • | | | | 252 |
| tgctccccc | CC | | | | | 232 |
| | | | | | | |
| <210> | 5755 | | | | | |
| <211> | 372 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <400> | 5755 | | | | | |
| aggaaacctc | tagacgaatc | ctcttattga | agcttctaga | gaaagctaca | tgacgctgcg | 60 |
| | | | | | | 120 |
| ctcgtataaa | cgctgcacag | ccttcgttaa | ccattggatc | ttttcgaaat | ccggcccgaa | 120 |
| aattcacatg | acagttgtcc | atgatctgac | cgttgggatc | tttgagaaga | cgtttggagt | 180 |
| gtgctagaag | cctcttaatg | aaccttttgg | aggaagcctc | ctaatgaagc | ttctagagag | 240 |
| _ | | | | | | |

| acctacgtga | agctacctca | ttataaacgc | ttcccagcct | tctttaacgc | gtggatcttc | 300 |
|----------------|-------------|--------------|-------------|------------------|------------|-----|
| tccaaattgg | gtctgaaact | tcacataaca | attgtacatg | atctgaccgt | tgggatctat | 360 |
| gagaagatgt | ct | | | | | 372 |
| 0.1.0 | 5056 | | | | | |
| <210> <211> | 5756 443 | | | | | |
| <211> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| | _ | | | | | |
| <223> | | all n locat: | ions | | | |
| <400> | 5756 | | | | | |
| agcttgaggt | tattccacaa | gtaaatgagt | agttggatga | gggtttggtt | cgtaagggct | 60 |
| | | | | | | |
| taactccttg | tgctttgttg | gtatccaaaa | taggtattat | gaggcactga | atccctatga | 120 |
| taggtagtat | gatgaatgtg | ttaaataata | caaccctctt | ttgtaaaatc | actcatgcat | 180 |
| caggiggiai | gacgaacgcg | ccgagcggcg | caacccccc | cegedddaec | 4000405040 | |
| ccaacatctt | catgattcac | atacataggg | actcattang | taggtttgtt | cttattttta | 240 |
| | | | | | | 200 |
| gtttcaatac | aaacttaggt | gctcatgcgg | aacaccttan | gtttgttgtg | ctttttggta | 300 |
| ggaataatca | acatgaaaat | acagaaaaaa | aaatgtatgt | tttatcgcat | tactttcctt | 360 |
| | | | | | | |
| aatttttaaa | tagggatcat | ggggttacca | caaaccctaa | gagaataaag | gtcagtcctg | 420 |
| agtgggggat | tccaccaagt | ata | | | | 443 |
| agegggeeae | · · | | | | | |
| | | | | | | |
| <210> | 5757 | | | | | |
| <211> | 414 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <223> | unsure at a | all n locat | ions | | | |
| <400> | 5757 | | | | | |
| | ~++<->+++> | atatattaat | 222Ct 2C22 | tattattat | atataggtgt | 60 |
| ntgatcatgt | gilcaaiila | acacactyge | adadctacaa | tattgtttct | acacagecyc | 0.0 |
| tttcactcca | gaatgtttct | gattcttgat | ctttctcatg | taatcattct | tcgtaaacgt | 120 |
| | | | | | | 400 |
| gtttcattgg | agaacagacg | cacatgacaa | caaagaacct, | ttaagaacca | ctaaaattca | 180 |
| atgtttcacg | atggagtggc | tctaaacact | acctgcaccc | tctcatttct | ctccctccgc | 240 |
| acgeeecacg | acggagegge | cccaacacac | accegoacce | | | |
| actctacttc | ctcgtccatc | ggctccacat | gcaacccacc | atcgcggatg | ctttcatctt | 300 |
| | | | | t and t as a = = | 201100100 | 360 |
| cgccgttgag | ctctaaactc | agtgctccga | gttggatcac | tcactcaacg | agilyacica | 360 |
| 2022011222 | atagatata | taacatacaa | tctacttctt | tracaaaatt | cato | 414 |

| <210> <211> <212> <213> | 5758 451 DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 5758 | |
| agctnttact | ctcttgtgct tgtgcctacc gttgtgcttg tgtgcattnt ttctgcgtgt | 60 |
| gctttgagtc | tattctcctg cattcttgct ctcatcttac atctttcacc tcaatccaag | 120 |
| taagcttttt | atgttatttt aattttcctt cagaagctta aaccttaggg tagacaattt | 180 |
| atangctttt | agtttcattt atggttagct tttgtgtttt cagtttttag ggtttacaat | 240 |
| gtagggttta | gttaggtett agageetaat agaggtaatg eetataagag gegtgaagae | 300 |
| ccccatttt | tgctggaaat cacgatgaac cgcgctagtg cgccagctgc gcttagccaa | 360 |
| ttcatcgcaa | ctgtcannat tttatatttc cagatgatcg cactaagccc gaccatgtcg | 420 |
| cactaagcgc | gttcagcctt ctgatgagtt c | 451 |
| <210> <211> <212> <213> | 5759 119 DNA Glycine max | |
| <400> | 5759 | |
| tgcactatca | a cacatgtgat cattagcaac atatattata tagtteetaa gatetttega | 60 |
| caacatttat | aaaatgttgc caaatatgaa taaatgttac taatatgttt ttgcaacat | 119 |
| <210> <211> <212> <213> | 5760 451 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5760 | |
| agcttcgaca | a coctaatgtt gttcaattto ttggagotgt tactgacaga aagcototta | 60 |
| tgttaattac | tgagtatctg agaggagtat gtgaatgcat ataactagac acctaggttc | 120 |
| tgatgctctg | g aacttatgca atcttatgct ntaagattaa actctactaa atctctattt | 180 |
| catgcccatt | tttagggtga tetteataag taeeteaagg acaaaggtge aettagntee | 240 |

| ttcaacagcc | atcaatttgg | cttggatatt | gctaggtatg | gtgtgtcata | ccttaagttt | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cctttatntt | tctttntaaa | atttttataa | agagaacaaa | cagaaaacca | canaacanga | 360 |
| gaatcattaa | cccatagatc | tcttcaacct | ctccatanat | ctggtatata | natataaacc | 420 |
| actcctaaat | aattctcaca | cgtcagttac | t | | | 451 |
| <210> <211> <212> <213> | 5761 411 DNA Glycine max | κ | | | | |
| | | 22925 | tattaattaa | attataaaa | aaaattacta | 60 |
| | | | | attctcccc | | |
| gtatgtgatt | ctattaatta | tttcaaattt | atttattctt | tataaatcgt | tatattttat | 120 |
| ttgttgcatg | ctttttttt | gcaggtggtc | atcttgtgta | caaattgctg | ttagtttaat | 180 |
| tcgcttatta | ttttagttat | tttttattaa | ttatataaca | aagctgttat | ttgtgcttta | 240 |
| atttttagaa | tataaattta | attatgattc | atagtaaata | ttactgtgat | aatgttatta | 300 |
| tgcgtattta | aaaaacgaag | gcttattatt | attatatatg | aaaaatatat | atatacgtgt | 360 |
| acttatatta | ttttctgaaa | tatgagaaat | tgacgaaaat | aatatatata | t | 411 |
| <210> <211> <212> <213> | 5762 448 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at a 5762 | all n locat: | ions | | | |
| agctngaagg | ggtgtaaccc | atcattctct | atagtagaac | agccggaacg | ngtctactat | 60 |
| cattattatc | atctccctct | ccatcattgg | agatgctact | tgagctgcta | ggtcccttca | 120 |
| cctctgggca | tattccttga | acaactcatg | ctccttcttg | cacatgtttt | gcaattgcac | 180 |
| tctatctaga | gccatgtccg | agttgtattg | atactgcctg | atgaaggcag | ccattaagtc | 240 |
| ttgttaagaa | tggactcggg | aaggttccag | aatagtatac | caggtgacga | ctgccccaat | 300 |
| aagagtttcc | tggaagaaat | gcatcaacaa | tttttcattt | ttcgagtatg | ccccattnt | 360 |
| agat satata | antttanast | gattetteee | acatataata | cccttgactt | atcaanatct | 420 |

| gcaccttgaa | cttcggaggg | ataacgat | | ٠ | | 448 |
|--|---|--|--|-------------------------------------|------------|------------|
| <210> <211> <212> <213> | 5763 438 DNA Glycine max | ¢ . | | | | |
| <400> | 5763 | | | | | |
| atatatcgca | ccatcactct | attcacttat | tctagaataa | tatgagtacc | tattctgaga | 60 |
| tgtaagaagt | cgaaattatg | aatcacaaat | tgattcctaa | actaaactta | aggaagtaca | 120 |
| tatatatcat | atatgaaatt | gcaacctaaa | acaaatggat | gcgattgcgt | caataaataa | 180 |
| atatatttat | attacaaatc | aagatcgtat | ctattattga | aaacatatat | gcatatatga | 240 |
| tatatcacta | cttttatttc | aatgcaccta | caaggaattc | tagcacgaga | gatttggcca | 300 |
| tgagaacttg | taccctgtaa | ttcaaatcaa | agcacatatt | ccatcgatag | aagatttttg | 360 |
| caaatctact | aaaacaattg | cgcattctaa | ttctcagcgg | attgcgtcta | tgtataggac | 420 |
| ccatcttcac | gaaaatca | | | | | 438 |
| <210> <211> <212> <213> | 5764 227 DNA Glycine max | x | | | | |
| <400> | 5764 | | | | | |
| aacaacacca | | | | | | |
| | gcatcgagca | catgaccgag | cggcaaaccc | cctgaaactg | tcatttgata | 60 |
| tttaatagag | | catgaccgag atgtgaaagg | | | | 60 120 |
| | taacggctct | atgtgaaagg | ctagagggaa | aagacactaa | | |
| aactaaacac | taacggctct | atgtgaaagg | ctagagggaa | aagacactaa ttaccctaaa | cgactctttg | 120 |
| aactaaacac | taacggctct | atgtgaaagg aacatacgag ctaagaacta | ctagagggaa | aagacactaa ttaccctaaa | cgactctttg | 120 180 |
| aactaaacac ttcatgagag <210> <211> <212> | taacggctct atttgcaccc agctagactc 5765 551 DNA Glycine ma: | atgtgaaagg aacatacgag ctaagaacta | ctagagggaa tcttattctt acaatcgttc | aagacactaa ttaccctaaa | cgactctttg | 120 180 |
| aactaaacac ttcatgagag <210> <211> <212> <213> <223> <400> | taacggctct atttgcaccc agctagactc 5765 551 DNA Glycine ma: unsure at 5765 | atgtgaaagg aacatacgag ctaagaacta | ctagagggaa tcttattctt acaatcgttc | aagacactaa ttaccctaaa ttctatc | cgactctttg | 120 180 |

| aagcttgagc | gtcatcgaag | tgtatgagaa | tgtatctgtc | atactgttga | aaggtagaga | 180 |
|-------------------------------------|--------------------------------------|-------------------|------------|------------|------------|-----|
| ccataccgaa | gagtcaagac | ttagcataag | acactgtcga | gcaacttgat | atatcatggg | 240 |
| ccttagtcgt | cgagcacgtc | aaacgtttgc | acgattgaaa | ggcctagagc | ttccgtgttc | 300 |
| tgcgaatgaa | gtgcctaaag | tgtgaggtgc | atgcaaacga | cattccacag | cgaggataga | 360 |
| ttctatgaat | ttgtgatcac | ttaccaatgg | acataacgag | gtttaataat | tactgagtcc | 420 |
| acctggcgat | gatcaagacg | aatagttgca | tgatgggatc | cgaccaacat | acttgaggcc | 480 |
| agatcaggga | taaagcttgg | aaataaatgc | aacaagggat | ggcctatggt | ggtagacgat | 540 |
| gcccacgagc | С | | | | | 551 |
| <210> <211> <212> <213> <223> <400> | 5766 366 DNA Glycine ma: unsure at a | x all n locat: | ions · | | | |
| | | tgaaatatga | atgtagcata | tagatccaaa | gaccettagg | 60 |
| | | | | gagtcttgtc | | 120 |
| | | | | ctgcttcagc | | 180 |
| | | | | ccataatttt | | 240 |
| | | | | taagttgtcg | | 300 |
| | | | | ctntgccgcg | | 360 |
| agtact | | | | | | 366 |
| June | | | | | | |
| <210> <211> <212> <213> | 5767 394 DNA Glycine ma | x | | | | |
| <400> | 5767 | | | | | |
| tgcgggagtt | tgtgatagcg | attatgacgt | tgatgttgat | gatagaaaag | cactaccgga | 60 |
| tttgtattgt | ttatgggcga | atgagttatt | acatggagat | ctaagaagca | aggcattgtg | 120 |
| acactttcta | cttgtgaagc | caagaatgta | gctgcaactt | cttgcacatg | tcatgccatt | 180 |

| tggctaataa | gaatgttgga | ggaacttcag | ttgttgcata | aggaaagcac | aaagatctat | 240 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gttgataata | gatctgcata | agagcttgcc | aagaatccgg | tgttccatga | acgaagtaag | 300 |
| catatagata | caaggcgatc | attcattaga | gagtgcaata | ccacgacaga | acgagaactg | 360 |
| acttatgtga | aaactcacga | tcaagttgcg | gata | | | 394 |
| <210> <211> <212> <213> | 5768 199 DNA Glycine max | ĸ | | | | |
| <400> | 5768 | | | | | |
| tgtgataagc | tagaacctta | tctatccaca | cgcctatgat | aacttaatta | acctccctat | 60 |
| agataattac | ggatgaatac | aacgatacat | agaatctatc | atccggcata | cctactatta | 120 |
| atatatagat | atatatatca | gggtgttact | actctctcac | cctcttagaa | aatatgcctc | 180 |
| taaggatacc | ttactcaga | | | | | 199 |
| <210> <211> <212> <213> | 5769 359 DNA Glycine ma: | × | | | | |
| ttttcatcta | tgatccctac | cctagaaatg | ggctacgctt | ctttctttcc | tttctaaggt | 60 |
| gacctttctc | ttgtcggcat | gtgtaggctt | gtaacctaga | ccgaagcttc | cacaattttc | 120 |
| aacaacctcc | ccaagctttc | tgtgccatta | ccattctgag | ctcataccca | tcgctcaaca | 180 |
| taacttgggc | caccatcaag | gaggcaccag | atagacgcgg | ttgcagcgga | ggagcctcca | 240 |
| cataagcatt | gctcacaatt | tctaatgctt | gaaaagatgt | ttccaatgac | tctgtcacag | 300 |
| cttgcacata | aggcgtagaa | gatggacaac | tcactagtat | atcttcttcc | cctgacact | 359 |
| <210><211><212><213> | 5770 461 DNA Glycine ma | x | | | | |
| <400> | 5770 | | | | | |
| tgtaatcgat | tacacacata | ctgtaatcga | ttaccagagg | atgttttat | aagacattct | 60 |

| caacagtcac | atctttgtat | ctggttctta | agtggccatc | ataggcttat | atatatgtga | 120 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ctagagacac | gaatttgaaa | aaagtttttc | agaacaaaaa | aggtcttatc | ctcttaaaaa | 180 |
| gcaaaatcgt | tttatcctct | tacaaattcc | ttgtccaaaa | cacttgtgat | tcaataagga | 240 |
| attatttgag | tgctcaaatt | gttcaattta | tctctttcaa | gagagatgtc | ttcttctctt | 300 |
| cttcttcatt | ctgaaaaggg | attaagagac | cgatggtctc | ttgttgtgaa | aggattctaa | 360 |
| acacaaagga | aggattgtcc | ttgcgtgttt | agaatttgta | aaaggacttt | acaagataat | 420 |
| ggaactctca | agcgggtgct | tgtggactgg | acgtacgcac | a | | 461 |
| <210> <211> <212> <213> | 5771 227 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5771 | all n locat: | ions | | | |
| tactttgtct | tcatttaact | gactatgcgc | ttggcggtca | cgctcaacat | agtactttcg | 60 |
| acacctacta | tacgttgatt | tcaccaatgc | tgttatggga | atgttgtgac | aatcctttaa | 120 |
| aaccttattg | atacattctg | acaggatcgn | tgatatgagg | ccatatcgac | gtgcgtctct | 180 |
| atcgcaagcc | atcgaccatt | tatcctttga | gatgcgagca | atccata | | 227 |
| <210> <211> <212> <213> | 5772 446 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| ggttcttgat | tntntcgaag | ttctttaaca | accttanaac | attatacttg | tccttcattt | 60 |
| aattgtcttt | gggcttgtca | accacgatca | acaaagtact | ttcgacacct | actatatgtt | 120 |
| gatttcacca | aggctgttat | cggtatgttg | cgacaatcct | tcaatacctt | atttacacat | 180 |
| ttggacaggt | tggttgtcat | gtgaccatat | ctacgtcctt | cttcatcata | agtcatagtc | 240 |
| catttttcct | ttgaaatgcg | atcaatccat | gttgctatgg | ctagactcaa | ttgacgaaat | 300 |
| ttttctaaat | tttgatcaaa | tatatgcttg | caaggagtgt | agcctgcata | aaattagtta | 360 |
| gcaataacaa | ttttaagtat | atatgaaact | tacattaact | tcatattata | aattaaatct | 420 |

| tacccaattg | tttcaacatt tctttt | 446 |
|-------------------------|--|-----|
| <210> <211> <212> <213> | 5773 395 DNA Glycine max | • |
| <223> <400> | unsure at all n locations 5773 | |
| atcctcagag | acacctgagg catgcaagct tcaacattca aattcgagcg tctcgttata | 60 |
| ttatattatc | tagtcagaca tccgagaaaa aagttattga cgtttgaatt tgctcagagc | 120 |
| ttcaacattc | aatttcgagc gtgtcgctat attacgggac tatatcagac atccgagtaa | 180 |
| aaagatattg | tcgtttgaat ttgctcagag cttcaacatt caatttcgag cgtgtcgata | 240 |
| tattacggga | ctcaatcaga catccgagta aaatgttatt gtcgnttgaa cttgctcaga | 300 |
| gcttcaacat | tcaagttcga gcgtctcgta tattatacga ctcaatcaca catccgagta | 360 |
| aaaagttatt | gtcatttgaa tttgctctga gcttc | 395 |
| <210> <211> <212> <213> | 5774 468 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5774 | |
| ntaggcaaat | tcaaacgaca ataacttttt actcggatgt ctaattgagt cccgtaatat | 60 |
| atcgagacgc | tcgaaattga atgttgaacc tatgagccaa ttcaaacgac aataactttt | 120 |
| tactcggatg | g totgattgag toccataata tatogagaog otogaaattg aatgttgaao | 180 |
| ctctgagcca | a attcaaacga caataacttt ttactcggat gtccgattca gtggtgtaat | 240 |
| atatcgggac | c gctcgaaatt gaatgttgaa cttctgagcc aattcaaacg acaataactt | 300 |
| tttactcgga | a tgtatgattg agtcccgaaa tatatcgaga cgctcgaaat tgaatgttga | 360 |
| acctctgago | c caattcaaac gacaataact ctttactcgg atgtccgatt cattgacgta | 420 |
| atatatcgcg | g acgetegaag atgaatgteg aacetatgag ecaattea | 468 |
| <210> <211> <212> | 5775 439 DNA | |

| <213> | Glycine max | : | | | | |
|--|---|---|---|---|---|--|
| <223> <400> | unsure at a 5775 | ill n locati | ons. | | | |
| acccgggatt | cttagagtca | cctgccgcat | gcaagcttat | ggtaatcang | agttagttcc | 60 |
| tctctcttaa | ggaaaaactc | aacattattn | tcattggatt | tacataatga | anaattgtcc | 120 |
| taatgataag | gttgatcact | tcaaggctca | tctagttact | aatggtttca | ctcacgttta | 180 |
| tggtgatagc | ttttcacttg | tcaccaagat | gccatttgtt | tgtctcttcc | ttgccatgac | 240 |
| tcccatgtgt | tattgggctc | tatttaaact | agacgttaan | aatgtctttc | tacacaacga | 300 |
| acatggagag | aaaatttata | tggaacacct | cattgttttt | aggaggagtc | taatttgggt | 360 |
| tataaacttc | attgctctct | ttatgggtta | aagcagtctt | cctgtgcttg | gttccaaggg | 420 |
| ttagtattgg | tattcaact | | | | | 439 |
| | | | | | | |
| <210> | 5776 | | | | | |
| <211> | 472 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 5776 | | | | | |
| | | | | cttataaatt | nttcaaaaaa | 60 |
| tctcagcggc | 5776 | acataaatat | gccaatgaca | | | 60 120 |
| tetcagegge tatategaaa | 5776 ttcagatgca | acataaatat tgcaagcctc | gccaatgaca aagagggagg | tatatgttga | gaggaaagtg | |
| teteagegge tatategaaa aateteaegg | 5776 ttcagatgca gtagatatta | acataaatat tgcaagcctc cactgtgatt | gccaatgaca aagagggagg caagagatct | tatatgttga ttgaggataa | gaggaaagtg agggtggact | 120 |
| teteagegge tatategaaa aateteaegg aaattgatgg | 5776 ttcagatgca gtagatatta aaggtgaatt | acataaatat tgcaagcctc cactgtgatt ctataatgaa | gccaatgaca aagagggagg caagagatct ccccttgtca | tatatgttga ttgaggataa gagagtttta | gaggaaagtg agggtggact tgctaatgtc | 120 180 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atetttetag | 5776 ttcagatgca gtagatatta aaggtgaatt aaatagttat | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca | tatatgttga ttgaggataa gagagtttta caggcataat | gaggaaagtg agggtggact tgctaatgtc tgttaaatat | 120 180 240 |
| teteagegge tatategaaa aateteaegg aaattgatgg atetttetag gactaagegg | 5776 ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tcttgtgtca | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa | 120 180 240 300 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atetttetag gactaagegg acagactatg | 5776 ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atetttetag gactaagegg acagactatg | 5776 ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atettetag gactaagegg acagactatg | ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat taggcatata | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atettetag gactaagegg acagactatg geatteccaa | 5776 ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat taggcatata | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atettetag gactaagegg acagactatg gcatteccaa | 5776 ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat taggcatata 5777 428 | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag gagacaaact | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atettetag gactaagegg acagactatg gcattcccaa <210> <211> <212> <213> | ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat taggcatata 5777 428 DNA Glycine max | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag gagacaaact | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat ctaaaggaaa | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atettetag gactaagegg acagactatg gcatteccaa <210> <211> <212> <213> <223> | ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat taggcatata 5777 428 DNA Glycine max unsure at a | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag gagacaaact | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat ctaaaggaaa | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |
| tetcagegge tatategaaa aatetcaegg aaattgatgg atettetag gactaagegg acagactatg gcattcccaa <210> <211> <212> <213> | ttcagatgca gtagatatta aaggtgaatt aaatagttat atggtttcaa ccatcaataa aggagtgtat taggcatata 5777 428 DNA Glycine max | acataaatat tgcaagcctc cactgtgatt ctataatgaa tgaaaggaag tctttttggc aaacaaagag gagacaaact | gccaatgaca aagagggagg caagagatct ccccttgtca tcttgtgtca tccatattga aaaagaatat ctaaaggaaa | tatatgttga ttgaggataa gagagtttta caggcataat gaatagggaa gattggtgaa | gaggaaagtg agggtggact tgctaatgtc tgttaaatat aagccaacaa aaagttttgt | 120 180 240 300 360 420 |

| agcttaacaa acttagaaat cttgtggtca tttattccga aatatagggg gagtaaacgc acattnttat ctatatacaa ttgtttgttg cttgcttgaa tcttgatttc acgtattgta ttgtcatcat caaaaaagggg gagattgtag atgcaattgc ctttggtgit ttgatgatga tcatgatgat gaaattgatg caaatgggct tttcaagatt aaaattcaaga caatacttca agattacaag tcacaacatc aagatggtca ctagtaaatt aggaagggaa ttcctaattg aattagcaaa aggttaggcc aagtaatgta aattaagaag tgtatttcag aggttntact ctctggtaat cgattaccag aggatgtaat cgattaccag tggccaaata tattntataa cagctact <210> | 60 120 180 240 300 360 420 428 |
|---|---|
| ttgtcatcat caaaaaggg gagattgtag atgcaattgc ctttggtgtt ttgatgatgtcatgatgatgatgatgatgatgatgatgatgatgatgatga | 180 240 300 360 420 |
| tcatgatgat gaaattgatg caaatgggct tttcaagatt aaattcaaga caatacttca agattacaag tcacaacatc aagatggtca ctagtaaatt aggaagggaa ttcctaattg aattagcaaa aggttaggcc aagtaatgta aattaagaag tgtatttcag aggttntact ctctggtaat cgattaccag aggatgtaat cgattaccag tggccaaata tattntataa cagctact <210> 5778 <211> 300 <212> DNA <213> Glycine max | 240 300 360 420 |
| agattacaag tcacaacatc aagatggtca ctagtaaatt aggaagggaa ttcctaattg aattagcaaa aggttaggcc aagtaatgta aattaagaag tgtatttcag aggttntact ctctggtaat cgattaccag aggatgtaat cgattaccag tggccaaata tattntataa cagctact <210> 5778 <211> 300 <212> DNA <213> Glycine max | 300 360 420 |
| aattagcaaa aggttaggcc aagtaatgta aattaagaag tgtatttcag aggttntact ctctggtaat cgattaccag aggatgtaat cgattaccag tggccaaata tattntataa cagctact <210> 5778 <211> 300 <212> DNA <213> Glycine max | 360 420 |
| ctctggtaat cgattaccag aggatgtaat cgattaccag tggccaaata tattntataa cagctact <210> 5778 <211> 300 <212> DNA <213> Glycine max | 420 |
| <pre>cagctact <210></pre> | |
| <210> 5778 <211> 300 <212> DNA <213> Glycine max | 428 |
| <211> 300 <212> DNA <213> Glycine max | |
| <400> 5778 | |
| | |
| cacatactgt gatccatcac cataggattc tatcaggaaa cattctccac agtcagatcg | 60 |
| atatatctgg ctgttatgtg gccatcaaag gcttatatat atgtgactag agacacgagc | 120 |
| ttgcaataag ctatacagaa cagaataggt cttatcctgt taaaaagcga tgtcgttcta | 180 |
| ttctcttacg aattccttgc ccaaaacact tgagattcag taaggagtta tatgagcgct | 240 |
| caccattgac atggtatctc tttcaagaga gaagtcgtca tctcttcttc ttcactctga | 300 |
| <210> 5779 <211> 363 <212> DNA <213> Glycine max | |
| <223> unsure at all n locations <400> 5779 | |
| agctntggcc aaaccccagc agcagttgtt ttcttagaga cttgtcttag caccttgtct | 60 |
| | 120 |
| ttgagactga ggataattac actgtgtgcc ttttgcagta gtgctttctt atccccatca | |
| ttgagactga ggataattac actgtgtgcc ttttgcagta gtgctttctt atccccatca gccatcatct tttcaagttt ggcttctcca tcaagtgctt ccaccaggcc ctgctgaaca | 180 |
| | 180 240 |

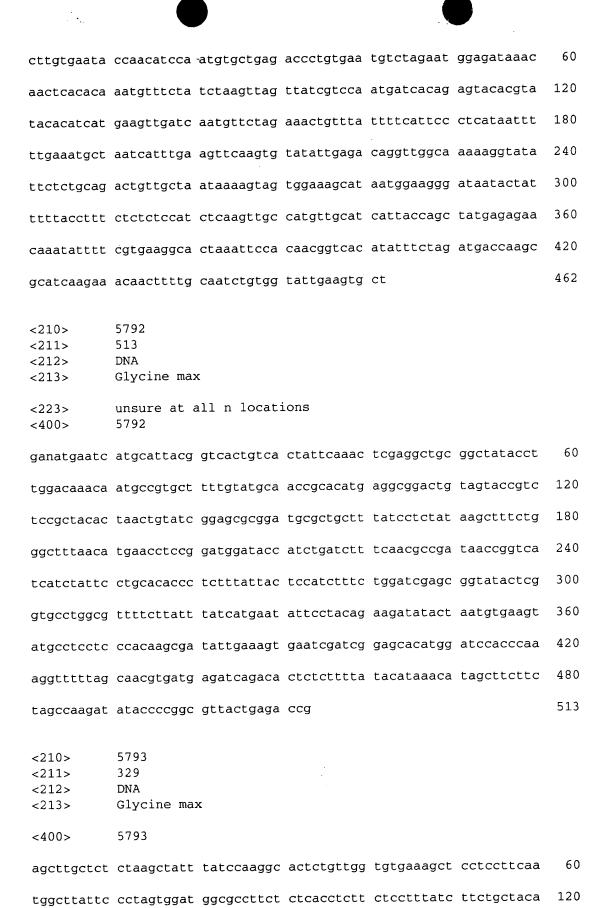
| gcaccaattt | ggtgtgccaa | gatcagaatt | tagttcacaa | aagagtgagt | ttcttgtatg | 360 |
|-------------------------|-----------------------------------|-------------------|--------------|------------|------------|-----|
| aac | | | | | | 363 |
| <210> <211> <212> <213> | 5780 417 DNA Glycine max | c | | | | |
| <400> | 5780 | | | | | |
| acacgtactg | ttgtctgata | ccaaagtact | ctttctgata | acaggctcaa | cagacacatc | 60 |
| ttgttatgtg | gatcttatgt | ggccgtctaa | ggcttatata | tatgtgacta | tggacacgat | 120 |
| atcctaaggt | gttattcaga | gcatgagatg | tcttatcctg | ttaaagagcg | aagctgtgat | 180 |
| atcctcttac | atatgccttg | atcatgacac | ttgtgattaa | ataagggatt | atttgagtgc | 240 |
| tcgaattgtc | caatatatct | ctttcaagag | agattacttc | ttctcttctt | cttcattctg | 300 |
| aaccgggatt | aacagacccg | cgttctattg | ctgagaaagg | atgttaagca | caaaagaatg | 360 |
| attgcccttg | tgtgtatatg | attagtcaga | gggatctaca | tgatagtgga | gctctca | 417 |
| <210> <211> <212> <213> | 5781 358 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5781 | all n locat | ions | | | |
| agccttctac | ttattaatta | tcataattta | gtttanaaat | aaccaagtag | agaataatat | 60 |
| ataaattata | tatttttatg | gaattatttn | tgtgaaataa | atttataagt | tatagattca | 120 |
| aatgtatgto | tcttttcgta | tattaaaaaa | ataatatcta | tctatactat | tataattcan | 180 |
| aattaatttg | attattcaat | . atacaaatto | : aataagtatt | ntatcaatta | tttgaactat | 240 |
| caattaagta | . aactaacaca | tantttgaaa | ttactaatat | tattatttt | ctattntact | 300 |
| cctannattt | aaactcantt | tttttatggt | cttcgtatta | atcctataat | atagaatc | 358 |
| <210> <211> <212> <213> | 5782 492 DNA Glycine ma | ax all n locat | cions | | | |
| 1225 | | | | | | |

| <400> | 5782 | | | | | |
|-------------------------------|-----------------------------------|------------------|------------|------------|--------------|-----|
| gcattacgga | cctatgaaac | tcagcttagc | agcttattgc | cataattcac | aaacctagat . | 60 |
| tccaaataac | agcaactcan | agtagttatt | agatagcatg | gaatatattt | catttttata | 120 |
| aaaaataaat | actatttaag | agaaagttaa | ggatacaaat | ataagaggat | aagatatcac | 180 |
| ccctaacaga | gcaaaacaaa | tgtagttatt | tgatttagta | cataattaca | tcactgtaag | 240 |
| tgatgtatat | tcacttacgt | tttagcagcc | tgcctgccct | taccaattgc | agcaccgaaa | 300 |
| tatctctaga | acaattacca | aatgaacaaa | tcattacaaa | aataccacat | ggaacttcca | 360 |
| aaaaggaata | tcaattgcat | gtgtaattat | aaagaagtct | ggaagttgct | atcaaatgac | 420 |
| aaaaagtagc | tcacatagga | nacaccggaa | ggttcaacca | tgtacaactg | tggtccatcc | 480 |
| ctgtcataac | ct | | | | | 492 |
| <210> <211> <212> <213> | 5783 341 DNA Glycine mas | × | | | | |
| <400> | 5783 | | | | | |
| ctcgaaatgg | aaagttgaac | ctatgagcca | attcaaacga | caataactta | ttactcggat | 60 |
| gactgataga | ctcccataat | atatagagac | tctctaaatt | gaatgctgaa | cctctgagcc | 120 |
| aattcaaacg | acatataact | atctactcgg | atgttcgatt | cacaggggta | atatatcgtg | 180 |
| acgctctcat | atgaatgttg | atcttatgag | ccaattcaaa | cgaccataac | tatatactcg | 240 |
| gatgtatgat | tgatccccga | aatatatagt | gacgctcgaa | atcgaatgat | gaacctctga | 300 |
| gccaaatgaa | acgacagtca | cttttgactc | ggatgatcga | t | | 341 |
| <210> <211> <212> <213> <223> | 5784 437 DNA Glycine ma | x all n locat | ions | | | |
| <400> | 5784 | | | | | |
| agcttgactg | acaactggag | tcacatatag | gtacaaagca | acaatgatgt | taaaacattg | 60 |
| aggaactctg | tttcacctag | gaatgacctt | acctcatatt | tagtaagaaa | attatgtgca | 120 |
| aaaaattcat | gcattattta | aggetettaa | caatccccaa | cccaccatgt | ttgagatatt | 180 |

| attatttgac | agttattgac | tatacttata | caaatttcaa | agccacacaa | cagattttac | 240 |
|----------------|-------------|-------------|------------|------------|------------|-----|
| | | | | • | | 200 |
| aacatggcta | gttttggttc | tgaaccacca | cccatcacgt | agtctagcaa | ttgacatata | 300 |
| agacaacttt | ggtagaatgt | gcaaaagtta | cagcaataag | cataataatt | aanaatgtta | 360 |
| atagacaaca | atttaccgaa | acaccagcag | gagggtcacg | ataaccagtt | agaagtgcat | 420 |
| acacatagtt | ctgacca | | | | | 437 |
| | | | | | | |
| <210> | 5785 | | | | | |
| <211> <212> | 455 DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <400> | 5785 | | | | | |
| gagtttctga | tgaattcttt | taccactgat | tgatgtctat | gggatctaag | tttcagaaag | 60 |
| acccattctc | caacttcaaa | acacaagtcc | ctcctcttct | tgttagcata | ccttgtcatt | 120 |
| tgttcctgag | ctatgagcaa | gacgtgagtt | gagttgaatc | aaagcctcat | ctctttcact | 180 |
| cgactccaat | gccgcagcag | caaccttagt | ctcattatac | agaaatctca | acaatgcaag | 240 |
| aggttgcctc | ccatatacca | cctccaacgg | agtcatccca | atagacacat | gataggaagt | 300 |
| gttgtgccaa | actcaggcca | agggacccac | aatgaccaag | tctatggatg | atcataagca | 360 |
| gagcaccgta | gataactatc | cagacacctg | gctaccacct | gcgtttgacc | atctgtgtcc | 420 |
| ggatgatatg | ctgaactcat | tgtcagctta | ttacc | | | 455 |
| | | | | | | |
| <210> <211> | 5786 446 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 5786 | | | | | |
| agctntatac | aacanatata | ctaagactca | ttcttatatg | caatgtggta | ccatgttagt | 60 |
| gaaaaacctc | gttggactcc | taggagtaca | tgataagaca | gaccacacac | tagtaagtca | 120 |
| ggtcactctc | actaggtaaa | atcataggga | gaccagtcag | ggtcactcta | ttttgtgaga | 180 |
| acactccaac | catatgagat | cagcataggc | ttcaaggaac | attcaaaccg | agtgtattta | 240 |
| gccccaaggc | ctacactcca | aagagtccgt | catgggcctc | tccttctggg | tcaggtccaa | 300 |

| cccagaaaaa | ttttagcacg | cagactctat | ctatgaactg | tacaaaacac | acgactcctc | 360 |
|-------------------------|-----------------------------------|------------------|------------|------------|------------|-----|
| aatggttctc | aaaaataatt | taactcgtcg | cgcctcanag | tgattaaact | catcgagttc | 420 |
| ccacagtgga | tcccatcata | atattc | | | | 446 |
| <210> <211> <212> <213> | 5787 412 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a 5787 | all n locati | ions | ٠. | | |
| ntcttgagan | aacttccttg | agaagcttct | ttgagaaaac | ttccttgaga | agctagagct | 60 |
| tagctacaca | cacccctctc | ataactaagc | tcacctcctt | gagaagcttc | cttgagaaga | 120 |
| ttcctaaaga | agctagagct | tagctacaca | cacctctcta | atagctaagc | tcaccttctt | 180 |
| gagatgagaa | gctagatctt | agctacacac | tccctataat | agctaagctc | acccccatga | 240 |
| caaaatacat | gaaaatacaa | aaaagtccct | actacaaaaa | ctactcaaaa | tgcctcaaaa | 300 |
| tacaaggcta | aaaccctata | ctgctagaat | ggccaaaata | caaggctcaa | acgaaggaaa | 360 |
| aacctattct | aataattaca | aagaataaca | ggctcatact | tagcccatgg | gc | 412 |
| <210> <211> <212> <213> | 5788 387 DNA Glycine max | x all n locat | ions | | | |
| <400> | 5788 | | | | | |
| agcttgtacc | agttgcaagc | actcagactc | caccacaaac | gaggtaaagg | agaggtcacg | 60 |
| agccatttgg | atcacccata | tcttanaaga | tagagcatct | tataactttn | tatattttat | 120 |
| ttcccttcca | tccttaaaat | atgtaggggt | aaacatgcta | gtttgtttat | tcatggacat | 180 |
| atgcataaaa | atatagtgta | gaacaagtta | gccaaacctc | tatcattaat | caagcacaag | 240 |
| acanttatta | tttaacattg | aatntatact | atagtgaatt | gttaaatcan | atgacaaatg | 300 |
| agtccaccaa | atattggttt | tcacgcaata | ctagttgtac | actttgttat | atattatctg | 360 |
| naaatattat | gtaatcgagt | ttttctc | | | | 387 |
| <210> | 5789 | | | | | |

| <211> <212> <213> | 385 DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 5789 | |
| agaaggaaga | aagaccactc ttggagtggg ttcagacgcc aaggaaagag naataaggag | 60 |
| gctcaaagcc | caagtccagc atttggatct ggattaagac atagagtcaa agatgataga | 120 |
| aaaacaaaaa | totatgttag atoottacto otttttagco octoottoto otactttota | 180 |
| ttctccatcc | caaaatcctc tagattactt ttttcccaaa gctagtccat catggtcttt | 240 |
| acctatagct | tctgcttata agaaaaaac agaaccacca aagacaaaac ctaccaaatt | 300 |
| aaatatctct | ttccaagagt cagttgaatc tcccacaaaa ttagaaaaca ctctaaagaa | 360 |
| agatacccat | gactnttaag attct | 385 |
| <210> <211> <212> <213> | 5790 431 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5790 | |
| tgaggcatgc | aagcttctct ttggcctaac ttctcttttc gtgtccattg ttttaatgct | 60 |
| agtttctttn | tgcgctgctc atttctttgt gcttaaggat aagtacaaga acatcttatt | 120 |
| ccccatttat | ggtgccactt gcttgcccgt gaccttctat gcagtgattc aatttccgtt | 180 |
| gtatgttgat | ctacttaaag ctattttaa gaaggtgcca caacgcgcca aaagataagg | 240 |
| gttgccattt | ttggttcttc ttactccatc ctccttgatc aatntaaaca gatcactagt | 300 |
| ttaattggaa | tgtttgtacc agactaatgt cttatctgta tttaattatg tctggaaaac | 360 |
| agtataccaa | tttcatagtt tggtggtgga atttgctcgc atttatatca tctcattatt | 420 |
| aatagccatc | a · | 431 |
| <210> <211> <212> <213> | 5791 462 DNA | |



| tctccatggt | tgaaaatcac | cattgaagga | cctcattgaa | gctcaaagat | gcagccttca | 180 |
|-------------------------------------|--|------------------|------------|------------|------------|-----|
| tagaagcttc | tcacgcaagc | ttccatcact | actggaggat | ccccatgaat | ccttctttcc | 240 |
| ctaacaaggg | aagaccccca | atagaaggca | tagccatgga | agctaagcag | cgtagcgaaa | 300 |
| ggaaccttcc | tttcctcacg | tgtatgatg | | | | 329 |
| <210> <211> <212> <213> <223> <400> | 5794 460 DNA Glycine max unsure at a | | ions | | | |
| | | | aananttata | tttcatacan | ttttattctc | 60 |
| - | | | | tttcgtgcan | | |
| | | | | ccattttact | | 120 |
| ctcgcttaac | ttaaaaataa | aatcaatttc | caccgaacgt | ttgaattgta | ttatccgtta | 180 |
| acttcgatta | aaatgaattc | cgaccgttcg | gtcgtgccgt | aaccacgttg | gaaatcaaaa | 240 |
| agaggtaaaa | aataatataa | taataaagaa | aaacatcttt | tagtaaaata | aagcggaaaa | 300 |
| tcaatcggac | gttttctctt | tgggatttct | cattcttaat | cgaattgatt | aataactaaa | 360 |
| gtgaaactaa | ggctaaaatc | aactcgccta | gtcaagctcg | tccacaaaaa | taggcttttg | 420 |
| aaatttgtca | tttcaatttc | tcactaagta | aaatggatca | | | 460 |
| <210> <211> <212> <213> <223> <400> | 5795 471 DNA Glycine mas unsure at a | x all n locat | ions | | | |
| agcttgtgag | tgtcatcatc | cacactcctc | aaccttccag | ttaaggggtg | atgaatattt | 60 |
| gcatcattga | ggatgaaaga | ctaaaaaatt | aagtgtatga | tattaatata | agaaatatat | 120 |
| gtgactaaca | tatcacatgt | aagataaaag | atcagttaaa | aaagataact | aattaaaaac | 180 |
| aacatgacaa | gctactaagg | aaagaaatga | ccaccaaaaa | tgctaattta | gatatccagt | 240 |
| tatatataat | atgaatgtgt | ttggttttgt | cctanaaata | taaattaatt | tttctttaca | 300 |
| | | | | | ggaggagaag | 360 |
| J: ::======= | | | | | | |

| ggataaact | c atcacctcta | cttgtacatn | agtatattgg | aatgatggga | ttgtgttcat | 420 |
|-------------------------|----------------------------------|-------------------|------------|--------------|------------|-----|
| caaatcata | n aactgtagaa | tcacgatgat | gtcttagaag | tatgcacatg | a | 471 |
| <210><211><212><213> | 5796 465 DNA Glycine ma | x | | | | |
| <400> | 5796 | | | | | |
| cctgagatt | g agagaaaatg | attattaaac | acaaaatgga | agtactaagt | atttattacc | 60 |
| tatacttaa | t agaaaatact | tataacacta | caaaataacc | ataaattgga | agagtttgat | 120 |
| acaatttac | a caagttttat | acacaaaagt | tagtcgtatt | catcgactaa | caggtggaag | 180 |
| aatgcgttg | a ataatagcac | tatagttacc | ttccacaaca | attatgtcac | tatggatgta | 240 |
| caagttctt | c ttggttaaca | tatccttcaa | aaatttggca | tagaagggca | tttgctgaag | 300 |
| tgcttctcc | a aaaggcaagg | taatttccag | tttcttgaag | ataccaagaa | atctagccaa | 360 |
| atgtcactc | t ttatctttc | atgagggtac | caattgataa | ggtacctcct | tgcattcaat | 420 |
| aggaggagc | c tctttcttct | tttctatgtt | agcctcactc | ttacc | | 465 |
| <210> <211> <212> <213> | 5797 448 DNA Glycine ma | ax all n locat | ions | | | |
| <400> | 5797 | | | | | |
| agcttctag | a gagttctaca | a ctactctagt | gttctctagg | acgttctaga | naattctaca | 60 |
| cttttctag | a gagetetaga | a attttctaga | acctctccaa | ttaaggaggg | atcccaacac | 120 |
| atctcccc | t cccgacttaa | a ttggggggta | gtagcaaacc | ggcaccttgg | ataccttatg | 180 |
| tcaatgtg | t ttggtcatca | a tgcaaggatt | gcttctcttc | ttgcatgact | cttctccact | 240 |
| ccaccaatt | c ataggtgtta | a ttctcatgca | cggattccat | ctcttcttgc | atgactattc | 300 |
| tccactcca | c caattcatag | g gtgttattct | catgncagga | ttgcatatct | tcttgcatgg | 360 |
| ctcttctcc | a ccaccaatto | c ataagtgtta | ttctcatgca | . aagatatcat | ctcttcttcc | 420 |
| atggctati | c theactecae | c caattcat | | | | 448 |

| <211> <212> <213> | 5798 380 DNA Glycine max | ζ | | | | |
|--|---|--|--|--|--|---------------------------------|
| <400> | 5798 | | | | | |
| cgaaactaat | tttgatatgc | caaataaggc | agagtttgaa | catggtctgt | taaggtatga | 60 |
| tgccataact | tgcagacttg | aagctatgtt | tctgcggtat | ttacatcatt | atattttgat | 120 |
| cttgttccaa | tcaagcgaat | tatcaagctc | gcataaggaa | ataaggttag | gtagcagtag | 180 |
| tggcgatatt | aattgctcat | tgcttgttgg | ctatatagaa | tataacatgc | ctactttttg | 240 |
| tactatgtat | agaagttaga | agtgcacctt | cctttctctc | ttctgcctca | aaaagccaac | 300 |
| atgatatgga | ggagaacata | ttctaattta | tgacatgtaa | cattaataac | aacctatagt | 360 |
| gctgacagat | tagtctgctt | | | | | 380 |
| <210> <211> <212> <213> | | x all n locat: | ions | | | |
| <400> | | | | | | |
| | 5799 | | | | | |
| agcttgnnga | ggatgatggn | | | | gctacgtggg | 60 |
| agcttgnnga | ggatgatggn | | | | gctacgtggg gcgatttgtg | 60 120 |
| agcttgnnga agtacgtgag | ggatgatggn ctcagttgga | ggtgggcaac | aggggatggt | gggtttatgc | | |
| agcttgnnga agtacgtgag gatgtagaaa | ggatgatggn ctcagttgga acttgttgtg | ggtgggcaac | aggggatggt cgaccgccac | gggtttatgc ctagtaccac | gcgatttgtg | 120 |
| agcttgnnga agtacgtgag gatgtagaaa taccccataa | ggatgatggn ctcagttgga acttgttgtg tcctacaagc | ggtgggcaac caccatcgcc ttgagatggn | aggggatggt cgaccgccac gaagtgtaga | gggtttatgc ctagtaccac agggtgaaac | gcgatttgtg | 120 180 |
| agcttgnnga agtacgtgag gatgtagaaa taccccataa tattcattga | ggatgatggn ctcagttgga acttgttgtg tcctacaagc ccacagagtg | ggtgggcaac caccatcgcc ttgagatggn gtacctggag | aggggatggt cgaccgccac gaagtgtaga atatgtcgcg | gggtttatgc ctagtaccac agggtgaaac ggggtcagga | gcgatttgtg atgtgatggg ttcctgcttt | 120 180 240 |
| agcttgnnga agtacgtgag gatgtagaaa taccccataa tattcattga acgtcaggtg | ggatgatggn ctcagttgga acttgttgtg tcctacaagc ccacagagtg gngtgctatt | ggtgggcaac caccatcgcc ttgagatggn gtacctggag gcccanaacc | aggggatggt cgaccgccac gaagtgtaga atatgtcgcg aagcttgacc | gggtttatgc ctagtaccac agggtgaaac ggggtcagga aatcccgacc | gcgatttgtg atgtgatggg ttcctgcttt gaccttgggg | 120 180 240 300 |
| agcttgnnga agtacgtgag gatgtagaaa taccccataa tattcattga acgtcaggtg | ggatgatggn ctcagttgga acttgttgtg tcctacaagc ccacagagtg gngtgctatt | ggtgggcaac caccatcgcc ttgagatggn gtacctggag gcccanaacc | aggggatggt cgaccgccac gaagtgtaga atatgtcgcg aagcttgacc | gggtttatgc ctagtaccac agggtgaaac ggggtcagga aatcccgacc | gcgatttgtg atgtgatggg ttcctgcttt gaccttgggg caacccgggc | 120 180 240 300 360 |

| gcttaatggc | tcaatgagca | aggggaaatg | atagtcaatc | aacatgtaaa | catacccttt | 60 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tctataggag | actactatga | tgacgţttta | tatgatataa | tccttatgga | tgcagggaac | 120 |
| attttgttgg | gtagaccatg | gcaatttaac | aagaaagaca | tccacaatgg | tctcaccaat | 180 |
| gaaataaccc | tcacccatgt | aagcaaaaag | ctcaaacttg | ttcccttgac | accttcacaa | 240 |
| gtggttgggg | atcaagtaca | aataaaactc | aaatgggatg | aggaaaataa | taaaataaag | 300 |
| actagaagaa | caacctttaa | tggttaagga | ggagtgtaag | gaggtaggtg | tctcctccaa | 360 |
| taggttagct | aagaagaaaa | gtcattctgc | aataaagaca | aacattaaag | acactttcct | 420 |
| tcttagacaa | cctccacata | ttctcctttg | taaaggacac | | | 460 |
| <210> <211> <212> <213> | 5801 334 DNA Glycine max | к | | | | |
| <400> | 5801 | | | | | 60 |
| - | | | | tcaaaaagcc | | 60 |
| | | | | aatcataagt | | 120 |
| | | | | aagcataaaa | | 180 |
| caaataccga | aagataacga | aagttcagaa | aatgataacc | taaaaagcat | agccaaatac | 240 |
| acggcttaca | ataaaataga | atgataatct | ataactaaga | aggtggtgga | ggtcaaagca | 300 |
| ccgacgaaga | taagtcacat | cctcttcaag | ctgg | | | 334 |
| <210> <211> <212> <213> | 5802 447 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5802 | all n locat | ions | | | |
| tgcggactat | acctttgaac | aaacactgcc | gtgtttctgt | ctcagcccgg | atttaaggcg | 60 |
| gactgcagca | ccggctccgc | ttcactaact | gtattggagg | cggctgccgt | ggctttatcc | 120 |
| tctatagttt | tctggagttt | taacatgacc | tccgagatgg | aagccatttg | atcttttaag | 180 |
| gccgatagat | cggccttcat | ctattcctgc | acgccctctt | cattatacat | ttttctggat | 240 |

| cgagtgttat | aggggtgcct | tggtgttttc | ttagttatga | tgaaattcct | aaagaaataa | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| acaaaggtga | gtatgccacc | aaaacatgaa | tatgtaaatg | aatgatcgga | gcacttggat | 360 |
| ccacccatag | gttnttatgt | aacgtgatga | gtccagaact | tctcattgta | taaaaagaac | 420 |
| agagctttca | tctatccaag | aatatac | | | | 447 |
| <210> <211> <212> <213> | 5803 379 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a 5803 | all n locat: | ions | | | |
| agcttctggt | gggacatctt | gacttgctnt | ccaatctgac | attcaccaca | gattctgcct | 60 |
| tcttctattn | tcagattgng | aatgcctcta | acagcacctt | tgtcaatgat | tntcttcatg | 120 |
| cctcttaagt | gcagatgtcc | aaatctttga | tgccatattc | tgacttcatc | ttctttggag | 180 |
| gatagacatg | tggaggagta | actggtttct | tgaggtgtcc | ataggtaaca | gttgtccttt | 240 |
| gatctgctgc | ccttcattag | aacttcactc | ttctcatttg | tcaccaagca | ttctgacttt | 300 |
| gtgaagttta | cattgaatcc | ttcatcacac | agctgactga | tgttgatcaa | agttgcagtc | 360 |
| agtcccttca | ccagcagta | | | | | 379 |
| <210> <211> <212> <213> | 5804 440 DNA Glycine ma | × | | | | |
| <400> | 5804 | | | 47 | | |
| tcgaagggaa | gagagagacc | aatcacgagc | acatagcatg | gtcttaaaag | aggagttagc | 60 |
| tgcttgctca | aggtccaaaa | gaagcttgtc | tcagcgttta | tgcgagacag | agaccaacat | 120 |
| gttagccatc | gtcagcaagt | accatgaaga | attaaatcta | gccacggtcc | acgagcacaa | 180 |
| agtggcggac | gagtatggad | gagtgtacgc | gaaaaaggag | gctataggaa | tggtgatcga | 240 |
| ctcgttacat | caagaggcaa | caatgtggat | ggaccgattt | tctcttactt | tgaacaggag | 300 |
| tcaagaactt | tctctattgc | tagccaaggc | catagccaaa | gcgatagcgg | gcacctactc | 360 |
| cacccccgag | gagatccact | gacttatcag | ttattgtccg | catatgatag | acttaatggc | 420 |
| aantataatt | agaaaggagt | | | | | 440 |

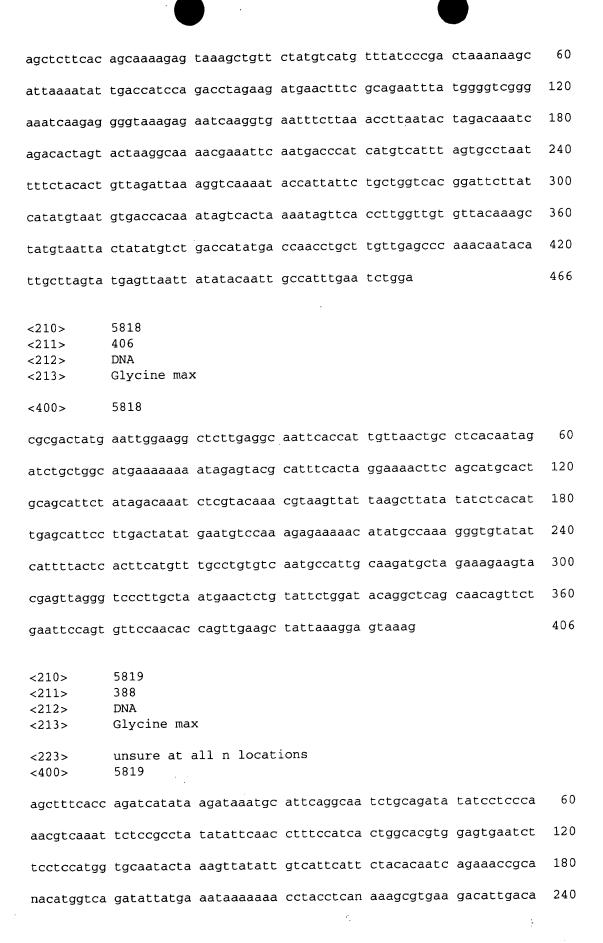
| <210> <211> <212> <213> | 5805 89 DNA Glycine max | : | | | | |
|-----------------------------------|-----------------------------------|-------------|-------------|------------|------------|-----|
| <400> | 5805 | | | | | |
| atcgattgaa | aacaactcca | tataatgaac | gctataccaa. | ggttctgacg | aggatctagg | 60 |
| actaccactg | ttcattctac | gggccaaaa | | | | 89 |
| <210> <211> <212> <213> | 5806 455 DNA Glycine max | | | | | |
| | | gaggtccttc | aatgatgatt | ttcagttata | gagttatagc | 60 |
| | | | | tagggaataa | | 120 |
| | | | | ttagaaagga | | 180 |
| | | | | aaggaaagat | | 240 |
| | | | | aaagttatga | | 300 |
| | | | | agaagctaga | | 360 |
| | | | | atgttaagtt | | 420 |
| | gaaaatacaa | | | 5 5 | | 455 |
| - Cadadacacac | guadaaaaa | 23333 | | | | |
| <210>, <211> <212> <213> | 5807 393 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| agctaagtct | atgatgtact | tcccttcggt | ctgtatgact | atagatatga | actgcgacgc | 60 |
| tgtcaacttn | ttagaatgac | aaatcaaggg | atacaaatca | cttttgcccg | tggttattga | 120 |
| atatttatct | gattttcagt | gtccatgccc | cctacatctc | attttacaga | tagtatataa | 180 |
| ccttttttt | ttcttttat | cacattctgc | atatgtacca | tagaagatga | tttcctgtgt | 240 |

| atgatcaacg | accctgcaac | aatttaaaaa | ccccttactg | tacttgtttt | taaataggag | 300 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| catttaatga | ttgctacttt | tctactaaca | cacttattta | aatcagtttt | tacaacatga | 360 |
| ttaattttaa | ataaacttac | tgcttcatat | cat | | | 393 |
| <210> <211> <212> <213> | 5808 138 DNA Glycine max | ζ | | | | |
| <400> | 5808 | | | | | |
| tgatgccgaa | caaacattta | ctaatcgaca | tcatccagtt | gttatataac | gagtgaatag | 60 |
| aataaacaat | ggccggtgat | gatcgatata | tggtctatgc | tgatatctga | tcaactacat | 120 |
| tgccgcaatt | tcttatac | | | · | | 138 |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | | | |
| <400> | 5809 | atctaaccac | tataaatcαt | ggtgaatggc | atacagtcag | 60 |
| | | | | | cttctaaaaa | 120 |
| | | | | | tgcatcaaat | 180 |
| | | | | | acattaacaa | 240 |
| | | | | | tttctttact | 300 |
| | | | | | | 360 |
| | | | | • | agatgaaaga | 420 |
| | | | | tttttaanat | tttcatctca | 451 |
| gatacaccca | agatgaaaga | accaaacact | a | | | 431 |
| <210> <211> <212> <213> | 5810 462 DNA Glycine ma | × | | | | |
| <400> | 5810 | | | | | |
| tctatggaca | ctgaatctct | gaggtccttc | aatgatgatt | ttcagctata | gagttatagc | 60 |

| ataagataaa | agagaagagg | tgagaggagg | cgtcatctac | tagggaataa | gcaatggaag | 120 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aagaagtttc | accaccaaaa | gagtgtcttg | gataataagt | ttagaacgga | agcttcaatg | 180 |
| aagaaagata | atgagagaga | aaaaaagtgg | tgtgggaatg | aaggaaagat | atggagataa | 240 |
| gttaaacttt | gaagtgtgtc | tcacaagact | ctcattcatc | aaagttatga | caagtgctac | 300 |
| acatgtcttt | atttatagcc | tatcacggta | aactttcttg | agaagctaga | ggaagatagc | 360 |
| tttctttcga | agctagagtg | gggctactca | caccccttca | atagttaagt | ttcccccatg | 420 |
| ctagtataca | tgaacataca | atgtgaagct | tccttgagaa | gc | | 462 |
| <210> <211> <212> <213> | 5811 309 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| taattaaatt | ctgtcactac | tacantttta | cggccgcaga | atgtcggtgt | tagctgaaat | 60 |
| tnttttatga | cagaattgcg | aatcggaatt | caggtgtatt | tcgaataatt | ctattataaa | 120 |
| taaagcatta | acgtataaca | aataagaaat | ttataacatt | aatttaaaag | tactaatgat | 180 |
| tttattaaac | tgtaagcctt | agtaataaat | aattaanaaa | attatttata | gaattaagaa | 240 |
| ataattttt | attaaaaata | tcatangatt | acattaaaag | ttataataaa | aaaagcgtat | 300 |
| tcataaaac | | | | | | 309 |
| <210> <211> <212> <213> | 5812 272 DNA Glycine ma | x | | | | |
| <400> | 5812 | | | | | |
| atgacctgca | agtcgcttac | ttatatctct | tacttcgtta | agaagacgta | gcttgaaaca | 60 |
| actacatgat | cagctaagat | aattcaatct | acacgctgac | tttatcaaat | ggtcaatgtc | 120 |
| aacgcacgct | gcgcaccata | tagctaagac | aagctaagta | tctccttctt | aaaacaacat | 180 |
| tttcacctac | atatccgact | attcaccaga | tgtcaagcga | gtatcctgct | ctagatatgt | 240 |
| aatgatgcac | taatttacca | taggaacagc | tt | | | 272 |

| <210> <211> <212> <213> | 5813 335 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5813 | |
| gcaagcttct | aaggaagttt tctcaagaaa gcttctcaag gaagctacct agtctataaa | 60 |
| tagaagcatg | tgtaacactt gttgtaactt tgatgaatga aagctntatg agatacactt | 120 |
| caaagntcca | cttctttccc tcttttattc cttcaatttc gggctccccc cttctcttt | 180 |
| tcttttcctc | cattaaagca teetetteaa gettettate caaggeaatt ettggtggtg | 240 |
| aagctccttc | tttcttggct tattccctag gggatggtgc ctcccctatc ctcttctcct | 300 |
| ttgccttccg | ctgcatctcc atgatgaaaa atcac | 335 |
| <210> <211> <212> <213> | 5814 555 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5814 | |
| tcttgtggca | tattagatta tgagtggtcg ttttgattat acnnccacat tataggcttg | 60 |
| attcatgctt | acggaactta catactcaag ctcaacggtg acgccgatct gcattgaata | 120 |
| atccacatct | tgcgttgtca ttgagaagag agagagatac aagtgcgacg caatagtatt | 180 |
| aagctaccga | atgaaattgg agggcaaaaa gcgcgaaatc ttttttacaa actctgttct | 240 |
| gtaatcattt | ttgatataat gtggagggag taatatgttt tacagcagac ataaggacgt | 300 |
| acggcgtatt | aatgaattaa tgaccatgtg tagtctagaa gaagaaaggc ttgtaaggag | 360 |
| attggcgaga | gggattgttg taaagaggtt tggaaaaaac aaagaaccta ggttaaacct | 420 |
| aagagaaatg | gactggtgca atacctgctt aaactgatat atagaaggct gcaaacgtgg | 480 |
| tttctttata | cgataaatgg cacaaatgaa gaatatattg cgcacatgcc atataagatt | 540 |
| tgataagaaa | ggaag | 555 |
| <210> <211> <212> | 5815 370 DNA | |

| <213> | Glycine max | |
|-------------------------|--|-----|
| <400> | 5815 | |
| agcttatcct | tatggctagc ctccggactt cactccccgt gccactccgg aagatttaag | 60 |
| ccaagcccct | acttttgagg ggcaactccc gccttatgac gactatcccg ggcaagatga | 120 |
| tgaggaagga | gatacccatc teggeeecct getecacete aaagatecat eeccacatga | 180 |
| actaccccaa | ccaaacatag teegeeatat eeeggeetea eeeacaceeg taaaagaate | 240 |
| tgttcccttc | gcggaagata agggaaagat agaggcgctt gaaaagaggt aagagcagtt | 300 |
| gagggccttg | caattaccca ttctcggatt tagccgattt atgtctcgtg cccaatatcg | 360 |
| tcatttcctc | | 370 |
| <210> <211> <212> <213> | 5816 486 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5816 | |
| atgattcgat | gcctgcgaaa cctgaactat taagactcag cttgtgtcgg gtacctaccc | 60 |
| ggtgacgagc | c caagatatat gtttaacgaa tgagaaacgc ccaggagcgg actatgcctt | 120 |
| tgcgaaattc | ttcatcgcaa gtgttacaga tacgagtggg aagcgcctga gtttatactg | 180 |
| ttcttcacgg | g taaccgatgt acaacgcnat tcaatgagag ggaagngcct tacgggatga | 240 |
| acacattgct | acttcggtta ctcacctatt tatagccaaa taggggaggt ggttgacgac | 300 |
| cacctggccc | c acacaagcca gagtgtttct tgcatagatc acagtcttgt tgaagaatat | 360 |
| attggaagga | a ccatggagtc tggggctatt tgatccccat tttttaaaga caccccactg | 420 |
| tctattcggg | g atccttttac gaggaacggg acaactagtt caactaaacc ggtctttaga | 480 |
| acggct | | 486 |
| <210> <211> <212> <213> | 5817 466 DNA Glycine max unsure at all n locations | |
| <400> | 5817 | |



| ttgtcaaaaa | ccgcgaagac | acaatcaaaa | accaaaaaca | ttgtcatcta | taaaaacaga | 300 |
|----------------|-------------|--------------|------------|------------|------------|-----|
| gcatcataaa | cgaaattaat | aaacgatcat | aaacctccct | acgaagcgcg | aagacaatgc | 360 |
| cgcagatgaa | acccctcgaa | catgtaaa | | | | 388 |
| | 5000 | | | | | |
| <210> <211> | 5820 465 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | • | |
| | | | | | | |
| <223> | unsure at a | all n locati | lons | | | |
| <400> | 5820 | | | | | |
| tcagaccaaa | gcaacatata | atctaggtat | ccaaaacccc | tcaatttaat | ggattatcaa | 60 |
| ggtttgagaa | gtgaaattga | gaatgatgca | aatttgggct | caaactctca | cctcacacaa | 120 |
| gtctataaca | tcaatctaaa | cttgctcaaa | ctggatttgc | acctaaaatt | ccaccgaatc | 180 |
| aaaatttgag | tecteaacac | ccaattttac | cctataaatg | gctctttgct | cactatggcc | 240 |
| | | | | | | |
| atttggtttt | ctctcttgca | caacccangc | ttgctcataa | gtcctaaatg | acatttcaaa | 300 |
| ctatgattaa | ctcactttaa | cctccaaata | ccactaaatc | cagatttggc | cttctgactc | 360 |
| tcaaaaactc | actctttgtc | cactcataac | accatattct | cactttctaa | ccctaggtta | 420 |
| actctaccct | tcatccctag | cagttgctca | taagcaattt | cagca | | 465 |
| | | | | | | |
| <210> | 5821 | | | | | |
| <211> | 431 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | K | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 5821 | | | | | |
| | | | | | | |
| agcttctggt | gggacatctt | gacttgctnt | ccaatctgac | attcaccaca | gattctgcct | 60 |
| tcttctattn | tcagattggg | aatgcctcta | acagcacctt | tgtcaatgat | tntcttcatg | 120 |
| | | • | | | | 100 |
| cctcttaagt | gcagatgtcc | aaatctttga | tgccatattc | tgacttcatc | ttetttggag | 180 |
| gatagacatg | tggaggagta | actggtttct | tgaggtgtcc | ataggtaaca | gntgtccttt | 240 |
| gatctgctgc | ccttcattag | aacttcactc | ttctcatttg | tcaccaagca | ttctgacttt | 300 |
| gtgaagttta | cattgaatcc | ttcatcacac | agctgactga | tgctgatcaa | gtttgcagtc | 360 |
| 201000110 | aaaaaaataa | tttattaaaa | ctangaangt | catcatgaac | tagettteea | 420 |
| agtcccttca | ccaycaytac | LLLYLLCAYA | Ccangaangt | caccacgaac | cagectecea | -20 |

| tgccaatgat | С | | | | | 431 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| · - | 5822 453 DNA Glycine max | : | | | | |
| <400> | 5822 | | | | | |
| taacatgaga | ttccaacacc | ttgaattctc | gcaaacagct | taccaaaaac | tcacatgaat | 60 |
| gtgaatctca | tgatctcaca | taaagtctaa | tctaatcatt | aaataacatg | atctcaacca | 120 |
| cgtcttatat | catcattaag | aaatcaacca | acacaaccca | agatattcat | taatcaacat | 180 |
| aattatctca | tcatcaatat | aatattctca | acaacaacat | gatatattag | ccatagtaca | 240 |
| aggatagacc | aaaccatgaa | taataaatgt | gcgtcactat | accattgtga | caactttata | 300 |
| cctcatggtt | aaggttatca | aaacatccca | tacgtcttgg | gttactatct | ccttcattat | 360 |
| ctattatgtg | gctatgacct | tcatagctta | tagacatgat | aaataaggat | atactaactc | 420 |
| agttaagttg | gttcttgtct | catgtgaaag | cta | | | 453 |
| <210> <211> <212> <213> | 5823 268 DNA Glycine max | × | | | | |
| <400> | 5823 | | | | | |
| agcttcttat | ccaaggctca | tcttggtggt | gaagctcctt | cttccatggc | ttattcccta | 60 |
| gtggatggcg | cctgccttct | cctcttctcc | tttgccttcc | gctgcatctc | catggtgaaa | 120 |
| aatcaccatt | gaaggacctc | attgaagctc | acagatccag | cctccataga | agctccacaa | 180 |
| gcaagcttcc | atcactccgt | gacaaaatta | aaccctccaa | catccctaaa | tcatcttaaa | 240 |
| catagccaga | cctgcatgaa | aaatcccg | | | | 268 |
| <210> <211> <212> <213> | 5824 382 DNA Glycine ma | x | · | | | |
| <400> | 5824 | | | | gaaagatgtg | 60 |
| ctaacaagca | . ctctggtcat | gaaatttccc | tctcttcggc | ccaccagigt | gaaagatgtg | 00 |

| cgtgagtaga | taatgcaaat | gcaagatatt | tcaactcaac | ttaagaaatt | gtgaggttaa | 120 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| tatgcttgag | tccttcctgå | taaacttcat | tctgaacaca | tttctgctag | aatatgggtc | 180 |
| gtttaagatt | tcctacaaca | tacataatga | caaatggtct | attaatgaat | taatgaccat | 240 |
| gtgtattcta | gaataaaaaa | tgcttgtaat | ggagacgggt | gagagtgtat | tgttgtaaac | 300 |
| tgcttgtggg | aaaaacaaag | atactaagtc | tcaagctaat | cagaaaggga | ctggtagaat | 360 |
| accaccttta | gctgatattg | ag | | | • | 382 |
| <210> <211> <212> <213> | 5825 260 DNA Glycine max | c all n locat: | ions | | | |
| <400> | 5825 | | | | | |
| agctnttcaa | tcaatctttg | gctagctaca | ttagtgcaac | tacccncatc | aataatcaaa | 60 |
| gagcatattt | tccccatgat | catgcaccta | gtatgaaaag | agttcttcct | ttgagtttca | 120 |
| tctctatcct | ttcatgcact | ccccattaac | ctcctaacca | tcanaagatt | accttccagg | 180 |
| ggttgtgcat | cacattcact | ttcactctca | ctagaagaac | tagaagagct | agaagaagat | 240 |
| gcactagtga | tatccccatt | | | | | 260 |
| <210> <211> <212> <213> | 5826 466 DNA Glycine ma: | x | | | | |
| <400> | 5826 | | | | • | |
| cggttcgagg | tacttacccg | ttgaagatcg | aagaatgatg | aagaacgaat | gaagaacgtc | 60 |
| gaagaacggt | cgaaaccttt | gcgaaattct | tcacggaaag | cgttacggaa | acgtttcgga | 120 |
| agcgcctcgg | cttatatttt | cttcacggaa | acaatttttc | caagcaaatt | cgaaagagag | 180 |
| agaagtgcct | aaggggctga | accattttct | tcttcacttc | ctcccctatt | tatagcaaaa | 240 |
| taggggaggt | ggttgacgcc | cagctcgccc | aggcgagcca | ggttgcttcc | tccataagca | 300 |
| acagccttct | ggaggaatat | tctggagggc | ccaagtgggc | ctgggtgcta | tttgcacccc | 360 |
| catttttact | aagtacaccc | cccactgctt | tatttggcga | ttccttttt | cgtaaagtta | 420 |

| cggaaactta | cgaatgtcgt aacgatactt ggtttctttc cgtaat | 466 |
|-------------------------------|---|-----|
| <210> <211> <212> <213> | 5827 337 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5827 | |
| agcttcaacc | tttggtgccc atttctgctc caaatcgcga aaggagggca ttttcgaagt | 60 |
| cgtgatgtgc | gtgtctacga gtgggacttc gaaatttcag gtttgggtgg acttctttct | 120 |
| ctcttgattt | tcgtgggtat ggggttttgg gaaatatgat gggtagtgtt gctaagtttc | 180 |
| tgcttcatga | tagttatttg tgaaggaatt tgtggaaagc atgttgaaat tgccatgttt | 240 |
| ggatgagtta | aacataccca ttctgttnta gggtttttat gatgatgctc gtgatgttca | 300 |
| tgtgctgaaa | tttcttatgg aaaactgtta gagatga | 337 |
| <210> <211> <212> <213> <223> | 5828 451 DNA Glycine max unsure at all n locations | |
| <400> | 5828 | 60 |
| | ccactccatc attaggattt gttcctgcca tctcaaacaa acaaatcaaa caattatagt tgttgtttga atacctcacc cactcaagtg tatcacacaa | |
| | | |
| | tctctaatga aacactcttg ccttttacca ctctaattcc ccttgagttc caagagatta tggccacaac aaagaacaat tcaccaatat gtgtaaggta | |
| | gacaaggaaa aggttaacca agaaaaaggc taacaatgtt tttaggcaca | 300 |
| | a ataaaattca gaatttagga attcaagtaa caatccttca tacaaccaat | 360 |
| | aaagagatta tttttaagtt cttcaagcat gaaccattca gcccagattn | |
| | tttctaatct tgcttatatg a | 451 |
| | , percentage a | |
| <210> <211> <212> <213> | 5829 346 DNA Glycine max | |

| <400> | 5829 | | | | | |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| agcttctatg | ttcaatatcg | agcgtttcaa | ttaattatgt | gcctgaatcg | gacatccgag | 60 |
| tgaaaagtta | cgaccatctg | aatttcttga | gaacttctat | ttttcaagct | caagcgcctt | 120 |
| tatatatcat | gggcctcaat | cgtatatcca | tctcaaaagt | tatggtcgtc | tgaattggac | 180 |
| aagagctttc | gtgttgaatt | tcgagcgtct | cgatatattg | tggacctgaa | tcggacatcc | 240 |
| gagtaatatt | ttatgaccat | atgaatttcc | ctacaactta | cagtattata | taaggagcgt | 300 |
| ctctgtatat | catgggactc | aatgcgacat | tcatgttaaa | agttat | | 346 |
| <210> <211> <212> <213> | 5830 418 DNA Glycine ma: | × | | | | |
| <400> | 5830 | | | | | |
| tcattaagag | gcttcctcca | gaagcttcct | cgtggcttct | atgagaagct | ttctcatgag | 60 |
| gcttctgtga | gaagctagat | ccttatctat | ccacacccct | ctttgaactt | aattaacctc | 120 |
| cttaaaaata | attacagatg | aaaataacgt | acccaataat | caaacatcaa | acataattac | 180 |
| taataatata | tagatatata | tatcagggtg | atacagctct | ctcacccttt | tagaaatgtt | 240 |
| gtactccaaa | ttgaccatac | tctaacaatg | aatggcgagc | tgctcgcatc | taactatcta | 300 |
| agttccacgt | ggcatattct | cctgatgcac | ctgcccaaat | caccttgacc | aacggaatca | 360 |
| ttttgcctct | aacgtgttat | gttagcctat | cctcgaacct | cagaggcaat | gcttcata | 418 |
| <210> <211> <212> <213> | 5831 350 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5831 | all n locat | ions | | | |
| agctntgatg | gtgtcgagaa | gaaatcacat | gtttgtcatc | atcaaaaagg | cggagaatgt | 60 |
| gaatgtatgt | atacatgatt | gtgatgatgt | caaagaagaa | tctaacaagg | ctgcttcaaa | 120 |
| tgataagcat | ttgcttcaag | aataattcaa | gattgcttca | acaaacaaag | ccttgtttca | 180 |
| agattcactá | aagaccaagc | cttggcctta | aacaaagtgo | tttcaagaca | tgcaaggctc | 240 |
| tggtaatcga | ttaccaggaa | gtgtaatcga | ttatcagaag | acagggttga | gaaataactg | 300 |

| ttgaaaaatg | tcttgaatgt | gaattctcaa | catgtaagtc | gataccatat | | 350 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5832 508 DNA Glycine max | · | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| ctgacttcat | ttgccctccn | gtgacttacc | tgacactatc | tagaactcag | gtctggagaa | 60 |
| atacacggtc | tggagatatg | aactgttatg | tagtttagag | caacgagtga | gaacgctctg | 120 |
| aggcattgtt | acaatcatct | accatctcgt | ttgctgaacg | aggaggaaac | acctcggctt | 180 |
| ataatttgcc | taccgtagct | aatctttctg | tggatgctga | atgaatcatg | gaggcctcat | 240 |
| gcgccgtccc | tggtcttgat | taccttggcc | tacgactcat | agccatatgc | aggtggttgt | 300 |
| tgacggccac | ttcgtgcata | cgaggcacgg | ggcactcttc | ttctctgaag | actgatggga | 360 |
| gacgatatcg | acgatcatag | tgatcaggga | gctatgtgta | gctcgctttc | atattgcacc | 420 |
| ccagagtgca | ttatgaggga | cttattgatc | cccacaaacc | agtaaactcc | taatttctga | 480 |
| cccgatactc | agaacgagca | gaccatcg | | | | 508 |
| <210> <211> <212> <213> | 5833 450 DNA Glycine ma: | × | | æ | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| gcttatcgta | atcgattaga | taattatntt | ttagacaatg | actgggtttt | tatgagtctc | 60 |
| tactttaatc | aattaccagg | tgatgtaatc | gattacttct | ctcttaaaag | agtttctgaa | 120 |
| gtgatcaata | acactttatc | gattatatga | agaatctaat | tgattacatt | gttcttgaaa | 180 |
| gttttccaga | ttgtgcgaag | aatactttaa | tcgattgaaa | tgataatata | atcgattact | 240 |
| tctttgaaat | aattgattac | attgtatatt | taatcgatta | catgcgatta | taactatttt | 300 |
| ctctataaat | agccaccttg | tgttctcact | tcaatgtgga | aaaattaagt | gtgaaaatat | 360 |
| atgagttgaa | gtaacagatt | aagagaaaag | aataaagtgc | ttagatacaa | tgtgactcac | 420 |
| aacttctaat | ctttgattat | gaagatcata | | | | 450 |

| ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | <210> <211> <212> <213> | 5834 468 DNA Glycine max | |
|---|-------------------------|--|-----|
| acttgaaggg tccatctcat ggacaagaac ttcagcaatt ttggggaaag gaacataagg 120 aagttggctc gtggccgagg ccaagacgtt tccttctaaa tcacgacaaa ctacgcccat 180 gccaattcca ataccgttct tgcaagcggc atcaaagtt aattttatta attgctgagg 240 gtggacacca tctattctga tgagtcactg ttgtggcggc tctaaagcac tgtgtctcgg 300 caaataaccc aataggaacg atcaataact aagcttatgg cggttttctt ttgctgaaag 360 atccaattat tccttcttcg ccagattgac cataacatcc caaacatctg ctgtgcaaag 420 ccctctatcc ttggttcta agcatcatac cagccatgta ttaaacga 468 <210 | | | |
| aagttggctc gtggccgagg ccaagacgtt tccttctaaa tcacgacaaa ctacgccat 180 gccaattcca ataccgttct tgcaagcggc atcaaagttt aatttatta attgctgagg 240 gtggacacca tctattctga tgagtcactg ttgtggcggc tctaaagcac tgtgtctcgg 300 caaataaccc aataggaacg atcaataact aagcttatgg cggttttctt ttgctgaaag 360 atccaattat tccttcttcg ccagattgac cataacatcc caaacatctg ctgtgcaaag 420 ccctctatcc ttggtttcta agcatcatac cagccatgta ttaaacga 468 <210> 5835 <211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctggaaca agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | tgtgcaatct | anagccagtc agtttccaag atgaaattnt ggaaaactgg atcccttgtt | 60 |
| gccaattcca ataccgttct tgcaagcggc atcaaagttt aattttatta attgctgagg 240 gtggacacca tctattctga tgagtcactg ttgtggcggc tctaaagcac tgtgtctcgg 300 caaataaccc aataggaacg atcaataact aagcttatgg cggtttctt ttgctgaaag 360 atccaattat tccttcttcg ccagattgac cataacatcc caaacatctg ctgtgcaaag 420 ccctctatcc ttggtttcta agcatcatac cagccatgta ttaaacga 468 <210> 5835 <211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgacce tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <211> 377 <212> DNA <213> Glycine max <210> 5836 <211> 377 <212> DNA <213> Glycine max <210> Color max <210 | acttgaaggg | tccatctcat ggacaagaac ttcagcaatt ttggggaaag gaacataagg | 120 |
| gtggacacca tctattctga tgagtcactg ttgtggcggc tctaaagcac tgtgtctcgg 300 caaataaccc aataggaacg atcaataact aagcttatgg cggttttctt ttgctgaaag 360 atccaattat tccttcttcg ccagattgac cataacatcc caaacatctg ctgtgcaaag 420 ccctctatcc ttggtttcta agcatcatac cagccatgta ttaaacga 468 <210> 5835 <211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | aagttggctc | gtggccgagg ccaagacgtt tccttctaaa tcacgacaaa ctacgcccat | 180 |
| caaataaccc aataggaacg atcaataact aagcttatgg cggttttctt ttgctgaaag 360 atccaattat tccttcttcg ccagattgac cataacatcc caaacatctg ctgtgcaaaag 420 ccctctatcc ttggtttcta agcatcatac cagccatgta ttaaacga 468 <210> 5835 <211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaaca agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | gccaattcca | ataccgttct tgcaagcggc atcaaagttt aattttatta attgctgagg | 240 |
| atccaattat teettetteg ecagattgae cataacatee caaacatetg etgtgeaaag 420 ceetetatee ttggttteta ageateatae eagecatgta ttaaaega 468 <210 > 5835 <211 > 356 <212 > DNA <213 > Glycine max <223 > unsure at all n locations <400 > 5835 cattgtgeat gteeteaae etatecacat tgtgtaentg aacetgaeee tgaaceteae 60 ceatgttgtg tateteacae ectaagatge atgttettga tattaegtta eaaggeatea 120 aaagtgtttg caegegeage eggagaatgt gttegteaee tgeggateae ggnggtggag 180 ctetgtgaga ggetteaaae eattggagaa gaactetetg tttatgeaaa eaatttggge 240 gteaaettgg agtteteggt ggtggagaag aatetggaaa atetgaaaee agaggaeata 300 caatggaggg aagaataegt tettgtggtg aatageatte tgtagetgea ttgeat 356 <210 > 5836 <211 > 377 <212 > DNA <213 > Glycine max | gtggacacca | tctattctga tgagtcactg ttgtggcggc tctaaagcac tgtgtctcgg | 300 |
| ccctctatcc ttggtttcta agcatcatac cagccatgta ttaaacga 468 <210> 5835 <211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | caaataaccc | aataggaacg atcaataact aagcttatgg cggttttctt ttgctgaaag | 360 |
| <pre> <210> 5835 <211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max </pre> | atccaattat | tccttcttcg ccagattgac cataacatcc caaacatctg ctgtgcaaag | 420 |
| <pre><211> 356 <212> DNA <213> Glycine max <223> unsure at all n locations <400> 5835 cattgtgcat gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max</pre> | ccctctatcc | ttggtttcta agcatcatac cagccatgta ttaaacga | 468 |
| cattgtgcat gtcctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac 60 ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210 | <211> <212> | 356 DNA | |
| ccatgttgtg tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca 120 aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | | | |
| aaagtgtttg cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag 180 ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | cattgtgcat | gtccctcaac ctatccacat tgtgtacntg aacctgaccc tgaacctcac | 60 |
| ctctgtgaga ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc 240 gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | ccatgttgtg | tatctcacac cctaagatgc atgttcttga tattacgtta caaggcatca | 120 |
| gtcaacttgg agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata 300 caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat 356 <210> 5836 <211> 377 <212> DNA <213> Glycine max | aaagtgtttg | cacgcgcagc cggagaatgt gttcgtcacc tgcggatcac ggnggtggag | 180 |
| caatggaggg aagaatacgt tcttgtggtg aatagcattc tgtagctgca ttgcat <210> 5836 <211> 377 <212> DNA <213> Glycine max | ctctgtgaga | ggcttcaaac cattggagaa gaactctctg tttatgcaaa caatttgggc | 240 |
| <pre><210> 5836 <211> 377 <212> DNA <213> Glycine max</pre> | gtcaacttgg | agttctcggt ggtggagaag aatctggaaa atctgaaacc agaggacata | 300 |
| <211> 377 <212> DNA <213> Glycine max | caatggaggg | g aagaatacgt tettgtggtg aatageatte tgtagetgea ttgeat | 356 |
| <4UU> 5836 | <211> <212> | 377 DNA | |

| tgtatgcttt | gtctcttgca | cagtatggta | aggtatgcga | cccagcattt | ctgacgcgat | 60 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| gataatgggt | gaaaggggat | atagagatat | atggtataaa | tagcgatacg | aactgctacc | 120 |
| actgcaaaaa | atgtattgtc | cctaattgct | cactctgtat | aactcactac | attactctct | 180 |
| gctctatatc | cataatttca | atcgcttagt | ggagctatag | atggcgcttt | ggccaatttg | 240 |
| atcattaggt | tgtctgacct | gtaaattcat | tggtaatcat | agacttacta | tgagatatga | 300 |
| tacccctaga | aagtaccatg | tacgtatact | aaccactgtc | atgataactg | gcattctgac | 360 |
| tctcgaaagc | tcactga | | | | | 377 |
| <210> <211> <212> <213> | 5837 379 DNA Glycine max | × | | | | |
| <400> | 5837 | | | | | |
| ctgcagctta | cttatgaagg | gtattccctc | tcgagctctt | ttttttttg | agatgattca | 60 |
| ttttcctctt | ccatgcaatt | tgtggtgatt | cttgtttaac | ttgtgaccgt | ttataatcct | 120 |
| aaatttatta | ctaccacaaa | ttattatatg | taagtttaga | tttactaaaa | tattatttgg | 180 |
| gaccaaaatt | ttacatattt | taattctatt | aggacaaata | aaaattctat | aggaacaaaa | 240 |
| ttaattttt | ttctatgtta | taaagaataa | aacatatttt | aacctattat | ttataatacc | 300 |
| tatattgggt | atccatgaat | agttttccta | ttttttatgg | cttagaggtc | aacatgagag | 360 |
| agggtgtagt | attgtattg | | | | | 379 |
| <210> <211> <212> <213> | 5838 496 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5838 | all n locat | ions | , | | |
| ttacgtgaca | ctatgaaact | aagctgaata | tgctgaagat | tacagttgct | ttaggagtat | 60 |
| aaaccacatg | ttatcaacac | caaaatatca | gtcataaata | aatctttgat | aggatgagct | 120 |
| tcaaactgta | tgctttaaga | agaagaaata | tatataaaaa | ttaaaaacat | accactgaga | 180 |
| atacttttt | gactgcttaa | taaatcatgt | ggaccacatc | caccttcact | ggtagttatc | 240 |

| tcctaggtat | agccctggaa | aagagaggca | gatctttatg | cattgcatat | cattacatag | 300 |
|----------------|-------------|--------------|--------------|------------|------------|-----|
| | | | | | | 360 |
| | | | ttttaattta | | | |
| agtgatgaaa | agatttatgt | tttgactgat | taacaacatt | ttaaaattag | tgtgcaatat | 420 |
| gaggaacata | aaggataccg | agaaacaaag | aaatacctaa | tatntgacac | aataatacag | 480 |
| accgaagtag | aatata | | | | | 496 |
| | | | | | | |
| <210> <211> | 5839 259 | | | | | |
| <211> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| cccttcaagt | aacgaagaat | tctttttgca | gcttttatat | gagaagaggt | aggagcctcc | 60 |
| gtanagcgac | acacaactcc | caccgcatat | agaatatcgg | gccttgtatt | ggttagatac | 120 |
| cttanactcc | ccacaagact | cttgaagacc | gtggagtcta | ccttctctcc | ttcatcanac | 180 |
| tttgataact | tcaagccacc | ttccatatgt | gtgttcacgg | gattgcaatc | aagcatatta | 240 |
| aatttcttca | acacttctt | | | | | 259 |
| | | | | | | |
| <210> <211> | 5840 487 | | | | | |
| <211> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <400> | 5840 | | | | | |
| ggacacttaa | atactaagct | taaggttatg | acttcatgtt | gctcacccta | tctctaagac | 60 |
| acacaccaca | aattctcctc | atgtcagcct | ttgcctttga | gttccaccca | tattttagtg | 120 |
| caaaccaaga | acctgagaag | attatactca | ttctttacgg | ctgggttagg | ttgagtggat | 180 |
| tggaagcaag | aaaaaaatac | tccctccgtt | actatttaca | aaagggtgtt | gtcgaattta | 240 |
| agctaattaa | gtattaacaa | gtactaatat | caattaatga | gacattagga | agtaacagta | 300 |
| acaattataa | gaaatagtat | caattatcaa | . tcatcaatca | tcaatcatca | attgatatat | 360 |
| tatcttatgt | atagatcata | aaataagatt | ttatcacata | acaatgacta | tgttcggaaa | 420 |
| aattaattag | aaactacaaa | tctagctaat | aactgacggg | tgtatatata | tatatatata | 480 |
| tatatat | | | | | | 487 |

| <210> | 5841 | | | | | |
|------------|-------------|--------------|------------|------------|------------|-----|
| <211> | 351 | • | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | C . | | | | |
| <223> | unsure at a | all n locati | ons. | | | |
| <400> | 5841 | | | | | |
| anagagata | aggeatgeaa | gcttccaaat | tagtgtacca | cactaccgct | tctccqqttt | 60 |
| | e • | | | | | |
| agctatcttg | aaagaagtgt | attaatagct | tttcatcctt | agagtgggcg | cccatcttac | 120 |
| ggcagtacat | cttgagatgg | tttttgggac | aaggctgccc | tttatacttg | tcaaagtccg | 180 |
| | | | | | | 240 |
| acactctgaa | cttcggngga | ataacaacat | cgggtactaa | gcaaagatcc | gtcatgtctg | 240 |
| cgaacggata | gtccccaaat | ccttccacgg | ccctcaatct | ttcctcaagg | agatcgáact | 300 |
| atcheettte | ttcaggtgct | gagggggtc | cttccgtgga | caaaactatt | g | 351 |
| 90000 | 33 3 | 3 433 43 | | | | |
| <210> | 5842 | | | | | |
| | | | | | | |
| <211> | 267 | | | | | |
| <212> | DNA | _ | | | | |
| <213> | Glycine max | x | | | | |
| <400> | 5842 | | | | | |
| agcttagcta | cactcacctg | ttcatgaact | atgctcacct | ccttgagaag | cttccttgag | 60 |
| 2200120200 | ttaggtggag | acacccatct | aaaaactgag | ctcacctcct | taggaagcta | 120 |
| | | | | | | |
| gagctcgact | acacacagcc | atctaacaac | taagctcacc | tcgttgactt | aggacatgca | 180 |
| agtgcatatg | gccacaagac | gtgcctacta | caaagactag | ctgaaaggcc | cgatggaaca | 240 |
| acgctgaaac | cgtatactac | tagaatg | | | | 267 |
| aogoogaaa | | | | | | |
| 210 | E042 | | | | | |
| <210> | 5843 | | | | | |
| <211> | 418 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x . | | | | |
| <223> | unsure at | all n locat: | ions | | | |
| <400> | 5843 | | | | | |
| agetetteee | acaacttacc | gttaaatctg | tgacctagcc | atggcagaag | tctccacaga | 60 |
| | | | | | | |
| ggccattgcc | tccctcgccc | agtattatga | tcagccgttg | agatgcttca | cttttgggga | 120 |
| cttccagcta | tcacccatgg | tggaagaatt | taaagagatc | ctacgatgtc | ctctaggggg | 180 |

| aaggagacca | tacctattct | aagggttcta | tccctcatta | gctaanattt | ctaagatagt | 240 |
|-------------------------------------|---|------------------|------------|------------|------------|-----|
| ccaaatctca | gcgcaggaat | tagaccacag | aaagcaactc | gaaaatgcgg | tggttggaat | 300 |
| accgagaaaa | tgtgtggagg | caaaagcaag | aatcttggta | ngtagaggcg | aatgggcccc | 360 |
| gttcatagac | attctcgcac | tgttgatctt | tggaggagtc | ctctttcaaa | tatggatg | 418 |
| <211> <212> | 5844 459 DNA Glycine max | × | | · | ÷ | |
| <400> | 5844 | | | | | |
| tgcttctaca | acctaagcac | acttagtgga | gaatcctgga | cttgatcttg | gattagtggg | 60 |
| ctaaaccata | gctaaatttc | actaatcata | attagtgaaa | ttttggctcc | aaatttggct | 120 |
| ccacaaattc | aaattcaagt | gaaatttgaa | tagaaattca | aatttccctc | caattttgtg | 180 |
| tgacacttaa | gctataaatg | gaggccttgt | gtgtgcagtt | tttcaacttg | atcatttgag | 240 |
| aattacactt | caaagttcat | acctcatttg | aggcttgaaa | tttcgtgctc | cttctctcct | 300 |
| tctccctcca | ctcatcttct | cctaccttca | agctcttatc | catggcttcc | tatggtggtg | 360 |
| agcttgttct | tgactcatct | tctcctttaa | agtgacattt | ccaatcatct | ttcttacttc | 420 |
| tccattctgc | tgccattgat | cttcaagaag | taaaggact | | | 459 |
| <210> <211> <212> <213> <223> <400> | 5845 341 DNA Glycine ma unsure at 5845 | x all n locat | ions | | | |
| | agatcatata | agataaatgc | tttcangcaa | tctgcagata | tatcctccca | 60 |
| J | | | | | gagtgaatct | 120 |
| _ | | | | | agaaaccgca | 180 |
| | | | | | gacattgaca | 240 |
| | | | | | taanaacaga | 300 |
| | | | | | | 341 |
| gcatcataaa | cyadalladi | aaacgatcat | auucccccc | | | |

| | 5846 441 DNA Glycine max | |
|-------------------------|--|-----|
| | unsure at all n locations 5846 | |
| tcagaccaaa | gcaacataaa atctaggtat ccaaaacccc tcaatttaat ggattttcaa | 60 |
| ggtttgagaa | gtgaaattga gaatgaggta aatttgggcc aaactctcac ctcacacaag | 120 |
| tctataacat | caatctaaac ttgctcaaac tggatttgca cctaaaattc caccgaatca | 180 |
| aaatttgact | cctcaacacc caattttacc ctagaaatgg ctctttgttc actttggtca | 240 |
| tttgttttc | tctcttgcac aacccaagct tcctcataag tcctaaatga catttcaaac | 300 |
| taggattaac | tcactttaac ctccaaatac cactaaatcc agatttggcc ttctgactct | 360 |
| caaaaactca | ctctttntcc actcataaca ccatattctc actttctaac cctaggttaa | 420 |
| ctctaccctt | catccctagc a | 441 |
| <210> <211> <212> <213> | 5847 411 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5847 | |
| agctgtagtt | gtatccctac ttttaagggt attctngcat gctgattggt ttttattatc | 60 |
| ttgtgcctag | ctntttagtt atcatgcata ttgactattg agctcctgtt aggtcttatt | 120 |
| gcgctacgat | tggttgggtc ttgttggatc ctttggttgt ttgggttgga tccaaaacat | 180 |
| ataacaaata | ttttttttgg tacagctgat aataatacta aaacttcatt ntatcttagt | 240 |
| ttcgtcatgc | agtaaaataa aaaaaatctt agtttcgtca catttcatta catcctaata | 300 |
| ctaaagtana | ttcatataat aattacttgt ttctaacatt attttctacg aatccctaaa | 360 |
| aaaccatgta | tgtattttat attetettee gtteetacaa getatttttg e | 411 |
| <210> <211> <212> <213> | 5848 432 DNA Glycine max | |

| <400> | 5848 | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| gttccaacat | ccaagcataa | caacattcaa | acagcataag | ctatcacagc | caagcaaaac | 60 |
| agagcaaagg | cagaaaactc | tgctcaacac | atcaacccaa | atcacagctt | ttctcactta | 120 |
| aagaccacag | taacaattcc | tttgatccaa | ttcgttaacc | gttggatcga | ctccaaaatt | 180 |
| ttactggaag | tctatagtgc | ataagcctac | attttgaccg | ttgggatcta | ctagaaaaca | 240 |
| tccagtactc | attctgtact | actctttcca | cagcgaacca | cacacaagca | ttttctgcac | 300 |
| caagctaaaa | tcctgctgca | cctattttga | cagcaaaatt | ctgcataagt | gcagatttcg | 360 |
| aaaatcacac | tttccctcat | ccaatcttgc | tcaaaacaga | tactacaagt | cccaaatcat | 420 |
| gtatcataca | tg | | | | | 432 |
| <210> <211> <212> <213> | 5849 383 DNA Glycine ma: | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttctttn | ggaccttgaa | caagcaatca | tctcctctnt | cagaaccatg | ctatgtgctc | 60 |
| gcgactggtc | cctttcttcc | cttcgcaact | tgagttcatt | attgctaccc | catagaagct | 120 |
| ccgcgaaatt | gttccggcca | tactcttcct | tgcgagccct | cttggtctct | ttttcaaggg | 180 |
| ctcttgcggt | aattgcattc | tcttcccgta | acccggcgca | ctccttccga | acgtgtgtag | 240 |
| cagccaactt | gaacttctcc | ttggcgagtt | ntgcctttcc | taactcgctn | ttgagagctt | 300 |
| ggacttcctc | gtcctcttcc | ggtgcttcaa | aattctcttc | gctgacgact | tttaactngg | 360 |
| cgagccaatc | taaacctcgt | atg | | | | 383 |
| <210> <211> <212> <213> | 5850 416 DNA Glycine ma | x | | | | |
| <400> | 5850 | | | | | |
| | | | | | : aagtaagtgc | 60 |
| | | | | | tgctcatatt | 120 |
| atgcgaaatt | cgcgaagcaa | ttcacatatg | aaaccatact | tgttttcgct | . aaattaaggg | 180 |

| gttgtaaggg | atggccttag | gcctatgttg | cattctggag | taatggggca | tgccacattg | 240 |
|-------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-----|
| ccccattct | cttgctattc | atgcctaaac | atgtgcccac | caagtgctcg | gtatagggac | 300 |
| aacatgtaga | ggttaaaatg | agtgcctgaa | tgcgaatcta | ggcctaggaa | cccaagcttt | 360 |
| tgatttcaat | acaagaaagc | gtaaaaatga | gggcattatg | ataggaattt | cccttt | 416 |
| <210> <211> <212> <213> | 5851 407 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5851 | ill n locat: | ions | | | |
| agcttggtct | aaaattcctc | gaaaattagc | tttntatgat | tatatcggaa | ataatccagc | 60 |
| aaaagggggg | ttatttagag | cacgttcaat | ggacaatgga | gatggaatag | ccgtcggttg | 120 |
| gttaggacat | cctgtcttta | gagataaaga | ggggcatgaa | ctttntgtac | gtcgtatgcc | 180 |
| tactttnttt | gaaacatttc | cggttgtttt | ggtagatggg | gatggaattg | ttagggccga | 240 |
| tgttcctttt | cgaagggcag | aatctaaata | tagtgtggaa | caagtaggtg | taattggtga | 300 |
| gttctatggt | ggcgagctta | atggagtcag | ttatagcgat | cccgctactg | tgaaaaatat | 360 |
| gctagacgtg | ctcaattggg | tgaaattttt | gaataaaatc | gtgctac | | 407 |
| <210> <211> <212> <213> | 5852 462 DNA Glycine ma: | × | | | | |
| <400> | 5852 | | | | | |
| tacttatctt | atagtttagg | tgctttatct | gttattggtt | ctattgcttg | atgctttgtc | 60 |
| tggtttaata | ataccgctta | tcctagtgag | ttttacgggc | ccactgggcc | agaagcttct | 120 |
| caagctcaag | g catttacttt | tctagttaga | gaccaacgto | ttggggctaa | tgtaggatct | 180 |
| gctcaagga | ctacaggttt | aggtaaatat | ctaatgcgtt | ccccgacagg | g agaagttatt | 240 |
| tttggggga | g aaactatgcg | cttttgggat | ttgcgtgctc | c cttggttaga | acctctaagg | 300 |
| ggtccgaat | g gtttagactt | gagtagacto | g aaaaaagata | a tacaatcttg | g gcaagaacgc | 360 |
| cgttctgcg | g aatatatgac | tcatgctcct | ttatgttcct | taaattccgt | gggtggcgta | 420 |

| gctacagaga | ttaatgcagg | caattatgtt | tctactagaa | ga . | | 462 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5853 399 DNA Glycine ma: | κ | | | | |
| <400> | 5853 | | | | | |
| agcttgttca | tatagtttca | acctgaggtt | ctttaaagac | ttagtaaaaa | tatcagccaa | 60 |
| gtgctacgag | atctatcttt | atgtgtttag | tatgttcatg | gaagactaaa | ttagatgcaa | 120 |
| tgtgaagaga | gcaacttgat | tttcacaaat | aagcttagtg | tcttgagtgt | ctccaaactt | 180 |
| taattgttgg | agaagttgcc | taagccatgt | aatttcgcat | gcaacttctg | tcatggtata | 240 |
| gtattcaact | tcagcgctgg | atctcgcaac | tatatttttg | cttttgcttc | tccatgagat | 300 |
| caaattccct | ccaagcagaa | cacaatagcc | tgaggtagaa | ctcctgtcca | atcagcacta | 360 |
| gagtaacaaa | caattttgac | attgtcttcg | tcttcatat | | | 399 |
| <210> <211> <212> <213> | 5854 409 DNA Glycine ma | × | | | | |
| <400> | 5854 | | | | | |
| tagagagaga | aatgcgtaga | gagagaaaca | ctgtgtgggg | gagagatagg | tctagaggaa | 60 |
| aggcatttca | aagtgacgga | gagaatccta | tggaggcaac | ccgacggctt | tatgccagag | 120 |
| acataggaaa | agcccatcaa | cactatgttg | tgacgaactg | gagagataat | atggatatca | 180 |
| catactgtta | ttttacccat | tttggagatg | atgttacaga | aagggagcta | tggtatcatt | 240 |
| tcaagaagtg | gggagacgcc | : cgggagatct | tgataccaca | tccgtataaa | ctacatggga | 300 |
| agaaggtatg | gacttgtcct | attcaacggg | atacgatata | ctagatacac | cgtcaggcag | 360 |
| ctggataaca | cattaaatcg | gcgggctgaa | gctatatgtt | aatatccct | | 409 |
| <210> <211> <212> <213> | 5855 431 DNA Glycine ma | ux | | | | |
| <400> | 5855 | | | | | |

| agcttataac | tgacatatgc | caatgcatgc | tctttccaca | ctacgtggtg | gaacaataat | 60 |
|----------------|----------------|--------------|------------|------------|------------|-----|
| gtgtcatgat | gccaactcaa | cactacatgc | attgggaaga | agaatgatcg | atttgcaagt | 120 |
| aattaatagt | agtatatata | ttagggaatt | gtagtcttct | gaaaaatttc | ttaacttttt | 180 |
| ttatcatctt | atttttaaaa | tattagactt | aatttcactt | ttttctttta | aatattatga | 240 |
| tagtataact | ttaatccttt | tatttttcat | tatggtcaat | aacttggata | attttttcc | 300 |
| ggaaccaatg | ggattctaag | agagtaggag | ttataaagtt | tacctgatga | ttgtgaaagg | 360 |
| agattaagca | taaagagaga | aggagagata | ataatggatt | tgaatctctc | attaccttct | 420 |
| aaaaataata | t | | | | | 431 |
| | | | | | | |
| <210> | 5856 | | | | | |
| <211> <212> | 436 DNA | | | | | |
| <212> | Glycine max | x | | | | |
| 1220 | _ | | | | | |
| <223> | | all n locat: | ions | | | |
| <400> | 5856 | | | | | |
| gtctagctnt | tcattggtgt | attttgatct | ccttttggtg | ctctaaaatg | tgggaatgtg | 60 |
| ctcaaatatg | tggggcaatt | ctggtttgtt | ttcttgcttg | tttgggttgg | attggaggtt | 120 |
| tgtatgggat | ggccctatgc | ctataatgca | ttttgaagca | atgggacatg | ccacattgtc | 180 |
| cccgttctct | tgctattgat | acctaaacgc | gcacccacca | agtgttcggt | gaaatgcctc | 240 |
| aatggaatta | gcgcgtgacc | tttgtaagga | aacaacccat | ggggcatttt | ggttcgcaca | 300 |
| tattttctat | ttttcgggac | atgcattcat | tcccgataaa | ggttacagta | attgccccac | 360 |
| atatatccta | agcttaggaa | ccagagtgtt | atgctataga | acacactacg | aggtgcatat | 420 |
| tgtgtaaagt | taccct | | | | | 436 |
| | | | | | | |
| <210> | 5857 | | | | | |
| <211> | 442 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | х | • | | | |
| .112 | uncuro at | all n locat | ions | | | |
| <223> <400> | unsure at 5857 | all ii locat | 10113 | | | • |
| | | | | | | |
| catgcaagct | taccacctto | aggaatccag | ctatgattco | aaaattgaat | ttgagctcta | 60 |
| tcgcctatcg | gtccttcata | agtttgttgc | accttcacco | aactgttaca | aatccctttc | 120 |

| cacaaattag | aacccgccct. | attagtatca | ataatgggta | acatgtcatc | accacactta | 180 |
|-------------------------|--------------------------------------|------------|------------|--------------|--------------|-----|
| tacttcgctc | tcatgatttg | aacccttagg | tcctctctac | tcaacataat | gcccaaccaa | 240 |
| tcttcatcat | atacgaagtg | ttaaccatcc | tagatggatc | taggaaagta | cacagactgc | 300 |
| attgcatagg | agggtaacgc | ttgaagaaca | gacgcaacaa | tttatataca | tatttataaa | 360 |
| gaaaaacaaa | aaatctctct | ctcctacaca | tttatcacat | cataataatg | aagtnaaata | 420 |
| cactattgta | tgtgtatctc | tt | | | | 442 |
| | 5858 548 DNA Glycine max unsure at a | | ions | | | |
| <400> | 5858 | 1 | | | at a gat gaa | 60 |
| | tcatcttatt | | | | | |
| | tcgtgttcan | | | | | 120 |
| aggctcacaa | tcactgtgtt | ctatacacat | agatggacgt | gtcgccacag | atacttgaga | 180 |
| gagggcgagt | gaggtatagt | cgtatagctt | ttctacaatg | catatagaac | tctatatgac | 240 |
| tcatgtctca | tgctatcata | ccgtgacgtt | tgagagacct | ctaacatgta | ggtcttgaca | 300 |
| aactgtcgac | ataacatcgg | cttcacatac | ctctatttca | cccatcattc | aaggatgata | 360 |
| cacaaacggg | ctatggtaga | gattaacaca | ttggagattc | tgggagactc | tctcccatcc | 420 |
| gattatccac | acgggaaaat | gcttggccct | gttattcatc | ggtactatat | tcaatacact | 480 |
| gtaggtcctg | gtaaccctta | ttgtcggcgt | acctatgaaa | acccttagtt | cgcagtacaa | 540 |
| caccgacg | | | | | | 548 |
| <210> <211> <212> <213> | 5859 201 DNA Glycine ma | x | | | | |
| <400> | 5859 | | | | | |
| agcttgtggg | agtactgaga | ctcgcggaag | gtttacgttg | tgttaccagt | ctacacatgc | 60 |
| cgacaagagg | agggtcaccc | tagataggaa | ggagagaagc | : ctggcccatc | : taccatggcg | 120 |
| aggactacaa | gtggaatggg | tcctcattcg | tcaaatcatt | gaaagctttg | tcagtgcatg | 180 |

| acggatgtgc | gaggatcaag t | 201 |
|-------------------------|--|------|
| <210> <211> <212> <213> | 5860 579 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5860 | |
| catctcctat | atctcttact ttctatttat atttcataac tcctnaacaa caacatacga | 60 |
| catgaatgag | tectgeggae ectacactae teaageetee gtettetata tegacagtat | 120 |
| atatcatgtc | gtgcgcctta catcaccact atggcatagg caacacgcat acctctggag | 180 |
| agcacacacg | tggtgaataa ccactcttgc cacggagete ttgatcatgg atctaatcac | 240 |
| catatgctgc | tactcaacct gctccttgct aatgtctacg cacctcacga ccggaaagac | 300 |
| tacagacagc | acttagctcg agttcactat aacagtaacg cttatgctct ctcaaagagc | 360 |
| cgactagtac | acctgtctac atgggcgaga cacgatagtg atatcagata ttatatatgt | 420 |
| cgctaaacat | atcagctcac agacagaaag ctgaacacct ggatgcgtaa ctgacctgac | 480 |
| aattgcacag | cctgggctcc ggagcctatg accacacagt ctcatacctc aagtcgcgac | 540 |
| tcacaţgcta | a ccacatgaca agagatcgac ctcatatgg | 579 |
| <210> <211> <212> <213> | 5861 248 DNA Glycine max | |
| <400> | 5861 | . 60 |
| | g ctcgtgatgt tcatgtgctg aaattgccta tggaaaactg gttgagatga | |
| | c taaccttagg ctagaaaggg agaatgtggt gttagaagtg gaaaaagagt | |
| | g ggctggaagg ccaaattctg gattggtagt attagacgct agagtgagtt | |
| aatcttaact | t tgaaatggca cttaagactt atgacgaaag ttatgctgtg ctacagagat | |
| aaaaaatg | | 248 |
| <210> <211> <212> | 5862 567 DNA | |

| <213> | Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 5862 | |
| actctattga | taattactat ctataattca anttttgtac tactactact ctaccatacc | 60 |
| actacagcgc | ttgaatcgtt tctgtaccgt cctatacatg ctcatgctgg aggcatatac | 120 |
| atggaagatg | ctatgatgcc attcggatat tcttctggag ctctataaag cggaaagagc | 180 |
| gtacgctata | tgagaggcac atgtggtacg ctttgtagct tgtgagggct ggagagacgg | 240 |
| actgtataga | tggccctatg ccttatatcg cctttagaag cacagggaca tgcctcatct | 300 |
| ctcccgttca | ttcgctattg acatcaaagc tcgcactcat caattgttat gtgaagcgcc | 360 |
| tcattggagt | agaagcgtga cctttgctgg gaaacactct atgggacgat gccgtctgac | 420 |
| acatcttcta | tttatcgtga cgtgcatcct ctcccaaaaa gttacaatgt atgaccatat | 480 |
| atatctcagg | aaccaacctc tattatgtct cgaaccacta catcggcgag tcggtaagtg | 540 |
| accttttatg | ccgctacaca ttgagcc | 567 |
| <210> <211> <212> <213> | 5863 406 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5863 | |
| agctngtcac | caatgtgagc atcaacaagg acaccagact cactcctgca gctgttggca | 60 |
| agggccctcc | ctacttcact atcatcatct ggctggntca ccacaagagg acttccacct | 120 |
| ttganaacct | caagettgtt tatggeaaat gaaceateag etteaaceae eteettgaag | 180 |
| tcttgcaggo | ttggtgcata cactggaata gtgaaactgt ctcttttctc actgctaatt | 240 |
| aatccctggg | g attaagaata tgaattagta catgtacctt agacatatca atacataaaa | 300 |
| ttaacaatat | actggatgct ttaattggtt gaaaaatgct taaaggagac aggaattgac | 360 |
| cattctaaac | c ccaaattgaa aaacagaaaa ctaatgacct cataac | 406 |
| <210> <211> <212> <213> | 5864 244 DNA Glycine max | |

| • | <400> | 5864 | | | | | |
|---|----------------|-------------|--------------|------------|--------------|------------|-----|
| 1 | tgtcttttt | ggctcacgat | cttgatacat | attgcatgcg | atacttgtct | tgacacgctg | 60 |
| | tatataatga | tgatatggat | ctgcttggga | atgagccgaa | gagtttgagt | cattttagaa | 120 |
| | ttgttggtga | cagtcctttc | accatgtatg | aaattcaggt | aaagaacgac | ttatactgat | 180 |
| | caacatactg | aattgggacc | acaagatcct | tcaatatgct | ttctgactct | tttactaaca | 240 |
| | ctta | | | | | | 244 |
| | | • | | | | | |
| | <210> <211> | 5865 348 | | | | | |
| | <211> <212> | DNA | | | | | |
| | <213> | Glycine max | x | | | | |
| | <223> <400> | unsure at 8 | all n locat: | ions | | | |
| | agctctatan | acgcgggtct | gggagacaaa | tgtatagtgt | tcgcgatatg | cgaagatgat | 60 |
| | gttctgagta | ctttggattt | ggtacgacca | tgccctcctg | atttccagct | gggaaattgg | 120 |
| | cgagtggagg | aacgccccgg | catttacgca | atgagcataa | tgtaaacctt | tacggtttta | 180 |
| | aaagctctat | agttgggcct | aggctttaga | gattttcctt | tgataaggct | ttgtgtcttt | 240 |
| | tgtttttgaa | cttataatac | aaggatcttt | cttcatctgt | tcctgggctc | tacccattct | 300 |
| | cattcatttg | catgtttact | tctttttctg | aaatgacaga | tccgatga | | 348 |
| | <210> | 5866 | | | | | |
| | <211> | 378 | | | | | |
| | <212> | DNA | | | | | |
| | <213> | Glycine ma | x | | | | |
| | <400> | 5866 | | | | | |
| | tctatactat | atacaagaat | gaagetetga | taccacttgt | tggacaagtg | gcctcagata | 60 |
| | tcttaagaag | ggggggggg | gatgaataac | cacacttccc | : acatagctct | tcataaagtt | 120 |
| | actaatcacc | ataagcttct | attcaacact | cctcttgcta | atgtttctga | cacgacttat | 180 |
| | aggaaagctc | acacattgca | catacctcat | ctcccacata | acattctatg | tatgcctcta | 240 |
| | aaattccagg | actaagacac | : ctgcctaaaa | cggagattaa | ı cgagacgaat | actagatatt | 300 |
| | atattgcttg | cattccatta | catcattaca | ttcttatata | tatgcacatg | aatgctgaat | 360 |
| | toctactcta | attcctct | | | | | 378 |

| <210> <211> <212> <213> | 5867 374 DNA Glycine max | ζ. | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a 5867 | ill n locati | ions | | | |
| agcttgtana | gtttagtcaa | cttttagaat | ttgatttata | tttgtattta | attatatttt | 60 |
| ggacctattt | ttggacttgt | aatggtttgc | gaccttccat | tgctattttt | aagtctttta | 120 |
| attattatat | tattagacta | cgacccttct | gtttaactct | atgttattct | ttctgctgcg | 180 |
| tacaaatgtg | aggtgaagtc | ccacattgtg | tcaaagtata | aaggttgagc | accatataag | 240 |
| tgaggagaaa | acccatatac | ctgaggccta | tgggtttggg | atagagcgtg | gtgtcacgtc | 300 |
| accttatgtg | gtggctcgtg | gtccacaggt | gtatcccttg | aatctttcca | ataatttgta | 360 |
| tcatagtcaa | tggg | | | | | 374 |
| <210> <211> <212> <213> | 5868 305 DNA Glycine max | | | | | |
| <400> | 5868 | | | | | |
| | | | | ctaggatcgt | | 60 |
| tttctgtgtt | acacacacta | ggtgaaatga | gattctcgct | ccggaattac | tcgccttgga | 120 |
| ttctttcctt | atctgattgt | cccttctctg | aatctttcta | aactccactc | ccctcactac | 180 |
| cagaaagact | acaaacagca | cgtagcaaga | gttatctagt | ctctagcact | tatgctctct | 240 |
| ccatgatccg | aatagtcccc | ttatctacat | gaacgtttga | agagagtgat | ataagatatt | 300 |
| attta | | | | | | 305 |
| <210> <211> <212> <213> | 5869 292 DNA Glycine max | C | | | | |
| <400> | 5869 | | | | | |
| agcatattet | ctataatata | catctagtta | acaacctaca | ctctagatag | atacatgtgt | 60 |

| aa | acactagat | agaaatgaga | gacttgtgag | actcgcttcg | gggtgcagaa | tatgtgcata | 120 |
|-----|--------------|-------------|--------------|------------|------------|------------|-----|
| | | | | | cgcagactat | | 180 |
| | | | | | gtggtgaaac | | 240 |
| | | | | | | | 292 |
| at | gactgatt | atacactggg | tygagatata | teteaacety | ttacctgtac | CC | 232 |
| <2 | 210> | 5870 | | | | | |
| | 211> 212> | 403 DNA | | | | | |
| | 213> | Glycine max | ς | | | | |
| <2 | 223> | unsure at a | all n locat: | ions | | | |
| < 4 | 100> | 5870 | | | | | |
| aç | gcttgtgag | agaaaaacta | ttcggcattt | acagnaatgt | ttgagtagct | caagcctatt | 60 |
| CC | caactagtc | ccattctccc | agacaacata | acagacattg | acatcaaaat | ctgattccga | 120 |
| aa | aatgctcaa | gcctattgtc | ttactacttc | cattgaaatg | atatttatgg | actttgttag | 180 |
| ag | gtgaattat | ngtatgattg | tattctgatg | aattttggat | tacaaataaa | taagttagca | 240 |
| tç | gcgtattat | agaaaattta | tggacctcta | ttatggtctc | aaatggttca | ttcctgtgan | 300 |
| ag | gctccatga | atgatattat | ccaggacttt | ctatctgtag | tctcttgttg | cggattgcag | 360 |
| aa | aagttatta | tcttggtaga | tcttaatgtg | caaagctagt | ttc | | 403 |
| | • | | | | | | |
| | 210> | 5871 | | | | | |
| | 211> 212> | 480 DNA | | | | | |
| <2 | 213> | Glycine ma | x | | | - | |
| <2 | 223> . | unsure at | all n locat: | ions | | | |
| < | 400> | 5871 | | | | | |
| ta | acggacact | atgaatacta | agctngacaa | catatggact | ggaaaatgga | tttgaatcct | 60 |
| gt | tattttgtg | gctcacgatc | ttgattcata | ttgcatgcga | taagtttctc | gtcacgctgt | 120 |
| at | tattatgat | gatctggatt | tgcaagggta | agagccaaag | tgtttgaatc | attttgaatt | 180 |
| ga | atggtgaga | gtcctttcac | catgtttgaa | atccaggtca | tgaacgagtt | atcctgttta | 240 |
| a | catatgatt | tgggaccaga | agattcttca | atatgctttt | tgactctttt | actcccaatt | 300 |
| at | tcaactgtt | gttgaaagtt | acgtctcttc | ttacctgttg | aaaaaagcc | agtactgtta | 360 |
| C. | aget et caa | .cacttgaatg | actateatte | tectecetta | ataacattac | attegeatge | 420 |

ccatcggata acgattattc cttgcctttg tttattgcca tatgaattat gctatgacat 480 5872 <210> <211> 420 <212> DNA Glycine max <213> unsure at all n locations <223> 5872 <400> agcttgtttg tccggtgcag cagtaatgat ggctcgagtt attgtggnga gcggnntacg 60 aacccgaatg ggtttaggca aagacaacga cggcataact agcctgataa atgccaaagg 120 aaatcgtggg aagcatgggt tacgctataa gcccactcag gcggatataa agaggagcgt 180 tgccggaagg aagagcggaa gtcaaggctc gcggttgaga caagaaggtg aaggaaaccc 240 accetgccae ataagtaaga getntataag egegageetg ggggaegaag gteaagtegt 300 cgctatatac gaagatgacg ttccgaatac gctgganttg gtacgaccat gcnnctctga 360 tttccaactg ggaaaatggc gagtggagga acgccccgac atttacgcga cgagcataat 420 5873 <210> <211> 471 <212> DNA <213> Glycine max unsure at all n locations <223> <400> 5873 tcaagaaaaa gatggcctca gcanattcct tatttccaga agggaattct atcaatagac 60 ctccaatctt taatggagag ggttaccact actggaaaac ccgaatgcaa atttttatcg 120 aggcaataga totaaatato tgggaagooa ttgaaatagg goottatata cocaccacag 180 tagaaagagt ttcaatagat ggtagttcat caagtgaaag cataaccata gaaaaaccta 240 gagatagatg gtctgaagag gatagaaaac gagtacaata caacctaaaa gccaaaaaca 300 taataacatc tgccctagga atggatgaat atttcagagt ttcaaattgc aagagtgcta 360 aggaaatgtg ggacactctt cgattaacac atgaaggaac tacagatgtt aaaagatcta 420 471 ngataaatgc actaactcat gagtatngaa tatttagaat gaatacaaat g <210> 5874 418 <211> <212> DNA

| <213> | Glycine max | |
|-------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5874 | |
| agctacagac | caaagcaact canaatctat gtatctaaaa cccctcaatt tagtggaatt | 60 |
| tcaaggtttg | agaagtgaaa atgagaatgg tgtaaatttg gagcaaactc tcacctcaca | 120 |
| caagtctata | accttaatct aaacttgctc aaactggttn tacgcctaan attccaccaa | 180 |
| atcaaaattt | gactcctcaa cacccaaatt ttaccctaga aatggctctt gccttcacta | 240 |
| tggtcttttg | tttttctcct ttgcacatcc caagctntcc cacagtccta aatgacattt | 300 |
| caaactagga | ttaactcact ttaacctcca atttctactg aatccagatt tagcctttca | 360 |
| aacgctcaaa | gcatcacact tttccactca taacactaca ttctcacttt ctaaccct | 418 |
| <210> <211> <212> <213> <400> | 5875 358 DNA Glycine max | |
| | atgttctgcc gagtcgatta atcatgctgg acgctagaga ttgtatacag | 60 |
| | ctaatctaaa tgacaataac ctttctctca caagtgtgat tgtgtcccgt | 120 |
| | gatgeteaag attgtaaaca caagetetga gecaatteaa agegacaata | 180 |
| | cggatatccg atggagtcat ttaataattc tagacgctca atattgaata | 240 |
| ccgaagctct | gagcaaatgc atatgacaat gacttttgac tcatatgtcc gattgagtca | 300 |
| tttaataatt | tgagaccctc tatagtgaat gcacgagctc tcaccaaatt taaatgac | 358 |
| <210> <211> <212> <213> | 5876 413 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5876 | |
| agcttangga | caggtactag caggtgctag tattctctaa tttcgttgct taaaattcct | 60 |
| gcttttattt | attagtttgg ttccttgaat cttattttaa tttgcctagt gtcataccct | 120 |
| aatttcatcc | gtgaaccttc atttgctaac attttgattc ttgctagccg aatngagcta | 180 |

| cttaacacca | ttataagaaa | tgggcaagaa | actcatagta | agggcaaaat | ggtcgcctgg | 240 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| gcccattata | agacttatgg | gagatgcaac | cagcttgcct | gggcgagcaa | gttgcttttg | 300 |
| gagtaagtca | ccggctctgc | tgggcggcaa | gctcctccct | ctatanttgt | acaaataggc | 360 |
| gtgggaagca | gaggggaagg | ggttcaacac | cttactgagc | tattccactg | aaa | 413 |
| <210> <211> <212> <213> <223> <400> | 5877 489 DNA Glycine mas unsure at a | K all n locat: | ions | | | |
| atgaatcatt | qaatcgctgc | atgaccggac | cttataatct | cagctgcaca | gtatggcctc | 60 |
| | | agggagatac | | | | 120 |
| | | cccgcgtagc | | | | 180 |
| | | gagcatatgc | | | | 240 |
| | | tggactgagg | | | *. | 300 |
| | | aacggcctat | | | | 360 |
| | | ataccttcaa | | | | 420 |
| - | | atacaaccct | | | | 480 |
| | ccaacacgga | 4545445555 | -999 | | . | 489 |
| caaggattt | | | | | | |
| <210> <211> <212> <213> | 5878 388 DNA Glycine ma | × | | | | |
| <400> | 5878 | | | | | |
| agcttctcaa | ggaagctacc | tagtctataa | atagaagaat | gtgtaacact | tgttgtaact | 60 |
| ttgatgaatg | agagtcttgt | gagacataac | tcaaagttca | acttctctct | ctttttcttc | 120 |
| cttaaatttc | gtgctcccc | ctctctctt | ctctccctct | ttcttttcct | ccattgaagc | 180 |
| atcctctcca | agcttcttat | cccagactca | tctgggtggt | gaagctcatt | cttccaaggc | 240 |
| ttattcccta | gtggatggcg | ccgcctctta | cctcttctcc | tttgtcttcc | gctgcatctc | 300 |
| catggtggaa | aatcaccatt | aaaggacctc | attgaagctc | aaagatccac | cctccataga | 360 |

| agctccacaa | gccagcttta | tcatcctc | | | | 388 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 5879 459 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tctggtggga | catcttgact | tgctntccaa | tctgacattc | atcacagatt | ctgccttctt | 60 |
| ctattttcag | attgggaatg | cctctaacag | cacctttgtc | aatgattttc | ttcatgcctc | 120 |
| ttaagtgcag | atgtccaaat | ctttgatgcc | atattctgac | ttcatcttct | ttggaggata | 180 |
| gacatgtgga | ggagtagctg | gtttcttgag | gtgtccatag | gtagcagttg | tcctttgatc | 240 |
| tgctgccctt | cattagaact | tcactcttct | catttgtcac | caagcattct | gactttgtga | 300 |
| ggtttacatt | gaatccttca | tcacacagct | gactgatgct | gatcaagttt | gcagtcagtc | 360 |
| ccttcaccac | cagtactttg | tccagactat | gaagttcatc | atgaactagc | tttcccattc | 420 |
| caatgatctn | tcctttatag | ccatctccaa | atgtcacat | | | 459 |
| <210> <211> <212> <213> | 5880 443 DNA Glycine ma | × | | \$ | | |
| <223> <400> | unsure at 5880 | all n locat | ions | | | |
| agcttatcgt | aatcgattag | ataattattt | tttagacaat | gactggtttt | tcaggagtct | 60 |
| ctactttaat | caattaccag | gtgatgtaat | cgattacttc | tctcttaaaa | gtgtgtctga | 120 |
| agtgatcaat | aacactttat | cgattatatc | aagaatctaa | ttgattacat | tgttcttgaa | 180 |
| agatggtcag | attttgggaa | gaatacttta | atcgattgaa | atgataatat | aatcgattac | 240 |
| ttctttgaaa | taattgatta | cattgtatat | ttaatcgatt | acatgcgatt | ataactattt | 300 |
| tctctataaa | tagccacctt | gtgttctcac | ttcaatgtgg | aaaaattaag | tgtgaagata | 360 |
| tatgagttga | agtaacagat | aaagagatna | gaacaaaagt | gcttagatac | aatgtgactc | 420 |
| acaacttcta | atctttgaat | atg . | | | | 443 |

| <210> <211> <212> <213> | 5881 479 DNA Glycine max | |
|--|---|--------------------------|
| <223> <400> | unsure at all n locations 5881 | |
| aagcttgtgc | aatctanagc cagtcagttt ccaagatgaa atcntggaaa actggatttc | 60 |
| ttgttacttg | aagggtccat ctcagggaca agaacttcag caattttggg gaaaggaaca | 120 |
| taaggaagtt | ggctcgtggc cgatgccaag acgtttcctt ctaaatcacg acaaactacg | 180 |
| cccatgccaa | ttccaatacc gttcttgcaa gcggcatcaa agtttaattn tattaattgc | 240 |
| tgatggtgga | caccatctat tctgatgagt cactgttgtg gcggctctaa agcactgtgt | 300 |
| ttcggcaaat | aacccaaaag gaacgatcaa taactaagct tatgggggtt ttcttttgct | 360 |
| gaaagataca | attattcctt cttcgccaga ttgaccataa catcccanac atctgcttgt | 420 |
| gcaaagccnc | ctattcttgt gttctaagca tcataccagc caagtattaa acgatgtgc | 479 |
| <210> <211> <212> <213> | 5882 374 DNA Glycine max | |
| <400> | 5882 | 60 |
| • | cttgaataat agaataaaga atctgaacaa acttattctt aattttttt | 60 |
| | catttattct ttttacaatt ggaccatatg tcgaaccata gggctcttgt | 400 |
| ~~~+~~+ | | 120 |
| | taggaccgct gttgttcaag ggagggcttg ttgctaggac aatattattg | 180 |
| ctatctatat | taggaccgct gttgttcaag ggagggcttg ttgctaggac aatattattg caacattaac aatcaatgat ttcttggaca aatatcatgc agactgaaaa | 180 240 |
| ctatctatat | taggaccgct gttgttcaag ggagggcttg ttgctaggac aatattattg | 180 240 300 |
| ctatctatat | taggaccgct gttgttcaag ggagggcttg ttgctaggac aatattattg caacattaac aatcaatgat ttcttggaca aatatcatgc agactgaaaa | 180 240 300 360 |
| ctatctatat | taggaccgct gttgttcaag ggagggcttg ttgctaggac aatattattg caacattaac aatcaatgat ttcttggaca aatatcatgc agactgaaaa ttaataaata aaagaggact ttaattgatc ctcttttaat cttcattatt tgcattggac ctaaataaat atttatatta ctatggccta caagattgta | 180 240 300 |
| ctatctatat ctaaacagtg tgtggcacta | taggaccgct gttgttcaag ggagggcttg ttgctaggac aatattattg caacattaac aatcaatgat ttcttggaca aatatcatgc agactgaaaa ttaataaata aaagaggact ttaattgatc ctcttttaat cttcattatt tgcattggac ctaaataaat atttatatta ctatggccta caagattgta | 180 240 300 360 |

| actcaagctt | atttaacggc | cnctacacta | ttattttcca | agtttcttta | ttgaaattat | 60 |
|-------------------------|-----------------------------------|------------|------------|------------|--------------|-----|
| gtgttattaa | tattaaattt | aaaaaatggc | ataaaaaata | aaataaaaaa | ctaattgctc | 120 |
| tttaaaatgc | ttttttaag | ttcttaacta | aattatgatg | tacattcttg | caaaaaaaaa | 180 |
| atcctttatt | gctacctttt | taaaatagtg | tgttggagga | tacccatgat | ttctaacttg | 240 |
| agaccaaaaa | atttcatgca | atgataattg | tattaacagt | atatttttaa | ttatattttg | 300 |
| ataatttata | taattcttaa | agaaaaatta | tgaatatata | agcttgcatc | atttttaaat | 360 |
| atgaagtata | ttaaattaca | acccttagtt | ttttttaggt | cttacaactg | ttagtcttta | 420 |
| caaagttgta | ttttcaggta | gtattgagtt | caatctttg | | | 459 |
| <210> <211> <212> <213> | 5884 315 DNA Glycine max | K | | | | |
| <400> | 5884 | | | | | |
| ttttttattc | atttaatctt | gtaatgattg | cttccttgaa | acggaaattc | tttattgaac | 60 |
| aatattgcta | catattggcc | tatatctgta | aaaccttgct | atttccagct | atataacaat | 120 |
| aatcagtctt | tagcggcact | cacctatatc | accggtaaaa | gcttctacag | cctaaattac | 180 |
| gccagttcaa | tttaattgca | gctcaactat | ttagcagcca | tatatatttg | ccgctcaccg | 240 |
| aaaggtattc | ttggtgttgg | gatcatcgag | tctgctaata | tgggtacatc | ctagtctttt | 300 |
| aacatgcata | aaata | | | | | 315 |
| <210> <211> <212> <213> | 5885 221 DNA Glycine ma | x | | | | |
| <400> | 5885 | | | ~~~ | anat ant ans | 60 |
| | | | | | gcctcgtcaa | |
| | | | | | accacatgca | 120 |
| ttgcacctca | tctgcgtatc | tttttcgctc | acgagctgca | taagaataac | ccatgtacta | 180 |
| ttgcaatcct | tcataagaac | tgaagaatcc | atgttagcat | С | | 221 |

| agcttgtaag gcttggatct tettcatcaa tagagtcatt tgettettga agatcaatgg 60 cagtagaatg gagaaggagg aacggtgatt ggagatgeca etttgttagt catcitatae 120 gactaacttt tgtatagaaa actittacaa aatgtataata ittecceaa ittatggtta 180 titittgtagg attetaaata aattitgett tgtittitate tgtgeteagt agaagcettg 240 tgtataggaat taatgtcaat iteeteteaa ittecaggaa aaaggagtta ittigaagaa 300 gigetaaagt taatgtcaat iteeteteaa itteaggaa aaaggagtta ittigaagaa 360 ceaagcaate aat 300 see 30 | <210> <211> <212> <213> | 5886 373 DNA Glycine max | ζ | | | | |
|--|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| cagtagaatg gagaaggag aacggtgatt ggagatgcca ctttgttagt catcttatac 120 gactaacttt tgtatagaaa actttacaa aatgtatata ttttccccaa tttatggtta 180 tttttgtagg attctaaata aattttgctt tgtttttatc tgtgctcagt agaagccttg 240 tgtatggaat taatgtccaat ttctcttcaa tttcaggcaa aaaggagtta ttttgaagaa 300 gtgctaaaagt taatgtctcg ctaagcgagc tcaatgcgct tagcgagtgt catcctctaa 360 ccaagtcatc aat 373 <210> 5887 <211> 456 <212> DNA <213> Glycine max <400> 5887 tgtcaattga accatcaat agccttgcat cctttctcac cattttctct ccaaaaatca 60 aaacttggaa cctcattctt ccccattatg catgagatct tcaaggagga agaggccaca 120 atttcatct tcttccaagc tccatcatat tgttttgact ttttctctca aagccttggt 180 aagaagccct taaacctttc ttttccttct aatttcttt tcatttttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 ttttttcct taaccatttt gtggaagct cactcaaggt aaggggagtc tttccacttc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | <400> | 5886 | | | | | |
| gactaacttt tgtatagaaa acttttacaa aatgtatata ttttccccaa tttatggtta 180 tttttgtagg attctaaata aattttgctt tgttttatc tgtgctcagt agaagccttg 240 tgtatggaat taatgtcaat ttctcttcaa tttcaggcaa aaaggagtta ttttgaagaa 300 gtgctaaagt taatgtctcg ctaagcgagc tcaatgcgct tagcgagtgt catcctctaa 360 ccaagtcatc aat 373 <210 | agcttgtaag | gcttggatct | tcttcatcaa | tagagtcatt | tgcttcttga | agatcaatgg | 60 |
| tttttgtagg attctaaata aattttgctt tgtttttatc tgtgctcagt agaagccttg 240 tgtatggaat taatgtcaat ttctcttcaa tttcaggcaa aaaggagtta ttttgaagaa 300 gtgctaaagt taatgtctcg ctaagcgagc tcaatgcgct tagcgagtgt catcctctaa 360 ccaagtcatc aat 373 <210> 5887 -211> 456 -212> DNA -213> Glycine max <400> 5887 tgtcaattga acacatcaat agccttgcat cctttctcac cattttctct ccaaaaatca 60 aaacttggaa cctcattctt ccccattatg catgagatct tcaaggagga agaggccaca 120 attttcatct tcttccaagc tccatcatat tgttttgact ttttctcta aagccttggt 180 aagaagccct taaacctttc ttttccttc aatttcttc tcattttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgaggacttca acatctaagc 300 tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccactc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 -211> 418 -212> DNA -213> Glycine max -223> unsure at all n locations | cagtagaatg | gagaaggagg | aacggtgatt | ggagatgcca | ctttgttagt | catcttatac | 120 |
| tgtatggaat taatgtcaat ttctcttcaa tttcagcaa aaaggagtta ttttgaagaa 300 gtgctaaagt taatgtctcg ctaagcgagc tcaatgcgct tagcgagtgt catcctctaa 360 ccaagtcatc aat 373 <210 > 5887 <211 > 456 <212 > DNA <213 > Glycine max <400 > 5887 tgtcaattga acacatcaat agccttgcat ccttctcac cattttctct ccaaaaatca 60 aaacttggaa cctcattctt ccccattatg catgagatct tcaaggagga agaggccaca 120 attttcatct tcttccaagc tccatcatat tgttttgact ttttctctca aagccttggt 180 aagaagccct taaacctttc ttttcctct aatttcttc tcattttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccactc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210 > 5888 <211 > 418 <212 > DNA <213 > Glycine max <223 > unsure at all n locations | gactaacttt | tgtatagaaa | acttttacaa | aatgtatata | ttttccccaa | tttatggtta | 180 |
| gtgctaaagt taatgtctcg ctaagcgagc tcaatgcgct tagcgagtgt catcctctaa 360 ccaagtcatc aat 373 <210> 5887 <211> 456 <212> DNA <213> Glycine max <400> 5887 tgtcaattga acacatcaat agccttgcat cctttctcac cattttctct ccaaaaatca 60 aaacttggaa cctcattctt ccccattatg catgagatct tcaaggagga agaggccaca 120 attttcatct tcttccaagc tccatcata tgttttgact ttttctcta aagccttggt 180 aagaagccct taaacctttc ttttccttc aatttcttc tcattttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 tttttttcct taaccatttt gtggaagct cactcaaggt aaggggagtc tttccactc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | tttttgtagg | attctaaata | aattttgctt | tgtttttatc | tgtgctcagt | agaagccttg | 240 |
| ccaagtcatc aat 373 <210> 5887 <211> 456 <212> DNA <213> Glycine max <400> 5887 tgtcaattga acacatcaat agcettgcat cettectcae cattetete ccaaaaatca 60 aaacttggaa cetcattett ecceattatg catgagatet teaaggagga agaggecaca 120 atteteatet tettecaage tecateatat tgttttgact tetteetea aagcettggt 180 aagaageeet taaacettee tetteetee taatteette teattettat gaaaaattet 240 taettgaggt tecaaattta tetteetee taatteette teattettat gaaaaattet 240 taettgaggt tecaaattta tetteetee tettggaaget tgagaettea acatetaage 300 tettetteet taaccattet gtggaaget eacteaaggt aaggggagte tetteeacte 360 ttaaacceta accettgetge eettggaage taggetteat tacatgetgt gatgettaaa 420 attecatate tgeggetgga caacceaatg tgatte 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | tgtatggaat | taatgtcaat | ttctcttcaa | tttcaggcaa | aaaggagtta | ttttgaagaa | 300 |
| <pre><210></pre> | gtgctaaagt | taatgtctcg | ctaagcgagc | tcaatgcgct | tagcgagtgt | catcctctaa | 360 |
| <pre><211> 456 <212> DNA <213> Glycine max </pre> <pre><400> 5887 tgtcaattga acacatcaat agccttgcat cctttctcac cattttctct ccaaaaatca 60 aaacttggaa cctcattctt ccccattatg catgagatct tcaaggagga agaggccaca 120 attttcatct tcttccaagc tccatcatat tgttttgact ttttctctca aagccttggt 180 aagaagccct taaacctttc ttttcctct aatttcttc tcattttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccacttc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 </pre> <pre><210> 5888 <211> 418 <212> DNA <213> Glycine max</pre> <223> unsure at all n locations | ccaagtcatc | aat | | | | | 373 |
| tgtcaattga acacatcaat agcettgcat cettteteac cattttetet ccaaaaatca 60 aaacttggaa cetcattett eeccattatg catgagatet teaaggagga agaggecaca 120 atttteatet tettecaage tecateatat tgttttgaet tttteetea aageettggt 180 aagaageeet taaacettte tttteetet aatttette teatttttat gaaaaattet 240 taettgaggt tecaaattta ttttteatee tttggaaget tgagaettea acatetaage 300 tttttteet taaceatttt gtggaagett caeteaaggt aaggggagte ttteeactte 360 ttaaaceeta acettgttge etttggaage taggetteat tacatgttgt gatgttaaa 420 attteatate tgeggetgga caaceeaatg tgatte 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | <211> <212> | 456 DNA | x | | | | |
| aaacttggaa cctcattctt ccccattatg catgagatct tcaaggagga agaggccaca 120 attttcatct tcttccaagc tccatcatat tgttttgact ttttctctca aagccttggt 180 aagaagccct taaacctttc ttttccttct aatttcttc tcattttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccacttc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | <400> | 5887 | | | | | |
| atttcatct tettecaage tecateata tgttttgact ttttetetea aageettggt 180 aagaageeet taaacettte tttteettet aatttette teattttat gaaaaattet 240 taettgaggt tecaaattta ttttteatee tttggaaget tgagaettea acatetaage 300 tttttteet taaceatttt gtggaagett caeteaaggt aaggggagte ttteeactte 360 ttaaaceeta acettgttge etttggaage taggetteat tacatgttgt gatgtttaaa 420 attteatate tgeggetgga caaceeaatg tgatte 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | tgtcaattga | acacatcaat | agccttgcat | cctttctcac | cattttctct | ccaaaaatca | 60 |
| aagaagccct taaacctttc ttttccttct aatttctttc tcattttat gaaaaattct 240 tacttgaggt tccaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccacttc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | aaacttggaa | cctcattctt | ccccattatg | catgagatct | tcaaggagga | agaggccaca | 120 |
| tacttgaggt tocaaattta tttttcatcc tttggaagct tgagacttca acatctaagc 300 tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccacttc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | attttcatct | tcttccaagc | tccatcatat | tgttttgact | ttttctctca | aagccttggt | 180 |
| tttttttcct taaccatttt gtggaagctt cactcaaggt aaggggagtc tttccacttc 360 ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | aagaagccct | taaacctttc | ttttccttct | aatttctttc | tcatttttat | gaaaaattct | 240 |
| ttaaacccta accttgttgc ctttggaagc taggcttcat tacatgttgt gatgtttaaa 420 atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | tacttgaggt | tccaaattta | tttttcatcc | tttggaagct | tgagacttca | acatctaagc | 300 |
| atttcatatc tgcggctgga caacccaatg tgattc 456 <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | tttttttcct | taaccatttt | gtggaagctt | cactcaaggt | aaggggagtc | tttccacttc | 360 |
| <pre> <210> 5888 <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations </pre> | | | | | | | |
| <211> 418 <212> DNA <213> Glycine max <223> unsure at all n locations | ttaaacccta | | ctttggaagc | taggcttcat | tacatgttgt | gatgtttaaa | 420 |
| | | accttgttgc | | | tacatgttgt | gatgtttaaa | |

